

An action plan for the conservation of harbour porpoises (*Phocoena phocoena*) - SE

1. Policy Objective & Theme

- SUSTAINABLE USE OF RESOURCES: Preserving coastal environment (its functioning and integrity) to share space
- SUSTAINABLE USE OF RESOURCES: Sound use of resources and promotion of less resource intensive processes/products

2. Key Approaches

- Participation
- Knowledge-based
- Ecosystems based approach
- Socio-economic

3. Experiences that can be exchanged

An action plan for the conservation of (threatened) marine mammals taking into account the nature of the sectoral threats. It could also be applied to other marine mammals in other seas e.g. dolphin species in the Mediterranean Sea.

4. Overview of the case

In order to conserve the threatened harbour porpoise populations in Swedish waters, a joint action plan has been drawn up by the Ministries of the Environment and Fisheries to address the various problems facing the species. The action plan has an implementation period of five years (2008-2013) and is based on a long term goal (to 2018).

5. Context and Objectives

a) Context

The harbour porpoise is globally listed as vulnerable and the population in the Baltic Sea as critically endangered. The species is distributed in cold temperate and sub-arctic coastal waters of the North Pacific, North Atlantic and Black Sea. Porpoises occur year round in all waters around Sweden: the Skagerrak Sea, the Kattegat Sea, the Sound and the Baltic Sea.

In the Baltic region, the number of harbour porpoises was drastically reduced by directed hunting in combination with severe ice conditions between the 1830's and 1950's, especially in the Baltic Sea itself. By the middle of the last century, the levels of organic contaminants like PCBs and DDT increased in the marine environment. Whilst the levels of these contaminants have decreased during the last decades, the levels of other contaminants are increasing. During the second half of the 20th century, by-catch by the fisheries industry has increased and by the 1990's this was considered to be the most serious threat to the global survival of the species. In this same period, disturbance by boat traffic and other human activities have intensified. Eutrophication and unsustainable fisheries have caused large scale changes in the marine environment and affected both the presence and quality of the prey species of the harbour porpoise.

b) Objectives

The long term objective of the action plan is that in the year 2018, the environmental conditions will allow the stocks of harbour

porpoise in Swedish waters to recover to at least 80% of their carrying capacity.

6. Implementation of the ICZM Approach (i.e. management, tools, resources)

a) Management

The Swedish Environmental Protection Agency and the Swedish Board of Fisheries are responsible for implementing the action plan.

b) ICZM tools

In the action plan, the species' ecology, status and threats to survival are reviewed and several actions are proposed to conserve the species. The plan has an implementation period extending from 2008 – 2013, after which the plan is to be reviewed. Based upon the current knowledge of the population structure and taking into account the precautionary principle, management units have been recommended for the waters around Sweden viz. (i) the eastern North Sea and the Skagerrak Sea, (2) the Kattegat Sea, the Belt Seas and the Sound, and (3) the Baltic Sea. However, the population structure is unclear and these recommendations of management units may be revised.

According to a survey of small cetaceans in northern European waters in 2005, the number of harbour porpoises in the Skagerrak Sea, the Kattegat Sea, the Belt Sea, the Sound and the westernmost part of the Baltic Sea totalled ca. 23,000 animals. In the Baltic Sea, the number is estimated to be between less than 100 and a few thousand but the uncertainty is large. The surveys have covered waters of several nations and not only Swedish waters.

In the action plan, limits to anthropogenic mortality of porpoises are proposed to be calculated in agreement with national and international conservation objectives. Regional working groups consisting of representatives of authorities, professional fishermen, environmental NGOs and scientists will be established. Their objective is to develop regional plans for concrete actions to reduce the number of bycatches of harbour porpoises to sustainable levels. Advantage will be taken of modifying fishing gear and practices in accordance with existing criteria for environmental certification of fisheries. Further actions proposed in the plan are systematic collections of ghost nets (discarded nets, still free-floating in the seas which continue to entrap and drown animals), development of fish traps as alternatives to gill-nets, arrangement of instruction for professional and recreational fishermen, development of a camera system for data collection on bycatches, and a survey of bycatches in recreational fisheries.

The population structure of harbour porpoises in the Baltic region, the effects of environmental contaminants on the health status of porpoises and the levels of anthropogenic, underwater noise will also be investigated. The occurrence and distribution range of harbour porpoises, as well as habitat requirements are proposed to be investigated by the use of porpoise click detectors. This increased knowledge about the species' occurrence and habitat requirements can be used for identification of suitable protected areas for the species.

7. Cost and resources

The cost for the proposed actions is approximately €3.9m during 2008-13.

8. Effectiveness (i.e. were the foreseen goals/objectives of the work reached?)

The plan is advisory and not legally binding.

9. Success and Fail factors

Several of the proposed actions are expected to improve the conservation status for species of seals, sea-birds and fish in addition to harbour porpoises.

10. Unforeseen outcomes

None so far.

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13. Sources

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