

PINNIPED MANAGEMENT AND THE IUCN PINNIPED ACTION PLAN

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I. Introduction

There are 34 different species of pinnipeds (seals, fur seals, walrus and sea lions). Some are already more or less extinct, like the Caribbean monk seal. For many others, our knowledge of the species and numbers is imperfect and it is thus very difficult to assess the status of those populations, not to mention the design of adequate management and conservation plans.

Nonetheless, there are at present 5 international legal instruments relevant to pinniped conservation: the Convention on Migratory Species or Bonn Convention, the Bern Convention, the Barcelona Convention whose fourth protocol includes the MEDSPA (Mediterranean Specially Protected Areas) a plan for creating protected areas in the Mediterranean, the Convention on the Conservation of Antarctic seals or London Convention and the CITES Convention. The latter in particular regulates trade for several species of pinnipeds. CITES lists pinniped species as follows:

- * Appendix I (totally protected). The Mediterranean monk seal, the Hawaiian monk seal and the Guadalupe fur seal.
- * Appendix II. All other fur seals, except the northern fur seal and the southern elephant seal.
- * Appendix III. All other pinniped species.

It is evident that, listing any species on a "red list" or bringing it under a convention, or national law does not automatically mean that its management or protection is complete and its future is certain. The Mediterranean monk seal (*Monachus monachus*) is a clear example. Despite being protected both nationally and internationally, its numbers continue to decrease or remain low and it seems unlikely that any recovery will happen in the next decades.

II. The IUCN Pinniped Action Plan

1. content and scope

Taking into account that legal systems cannot always prevent species and populations becoming threatened, the IUCN's recently published Pinniped Action Plan is aimed mostly at maintaining biodiversity in pinniped habitats, using habitat protection rather than species by species conservation as the major instrument for pinniped conservation. However, it does also take into account some specific requirements of endangered species.

It contains the following broad sections:

- * a revised listing and assignment of categories of threat to pinnipeds in the IUCN Red List
- * classification of pinnipeds (including some new opinions on taxonomy)
- * an overview of the status of all 34 pinniped species (with information on distribution, trophic relationships, population dynamics and human impacts)
- * major threats to pinniped populations
- * recommendations for conservation actions to ameliorate the problems of endangered or vulnerable species
- * recommendations for conservation actions where species are in conflict with human resource uses, particularly with fisheries

2. threats to pinnipeds

For the management and conservation of pinnipeds, it is relevant to classify categories of threats based on factors that could affect pinniped populations. In the Action Plan those are arranged in terms of the immediacy of their effect: immediate, intermediate and long term threats. In the context of this particular conference, the focus of this paper will be mainly on the most prominent area of immediate effects, *i.e.* the impact of fisheries on seals. This can take four major forms:

- * direct harvest for seal commodities
- * incidental killing
- * direct killing for the purposes of regulating pinniped numbers
- * effect of fishing activity on food availability

-international trade in seals (direct harvest)

A number of pinniped species are still harvested commercially. These include the southern sea lion, South American fur seal, South African fur seal, Baikal seal, Caspian seal, harp seal and hooded seals. The international trade includes two major activities:

- * seal skin trading in Canada
- * fur seal trade worldwide

There are additionally, substantial subsistence harvests of walrus, larga, ringed, ribbon, hooded and bearded seals.

There are certain problems with obtaining figures for the volume of international trade in seals, because reports tend only produced by countries that are members of CITES and usually only include the species that are endangered or at least on a CITES appendix. Nonetheless, based on the available data, it would appear that there is certainly some interest in a trade in some seal commodities.

A major requirement to evaluate the impact of the direct harvest is to achieve a better definition of units of trade, such that they can be related to pinniped numbers. This will allow a more objective assessment of the impact of such a harvest on the conservation status of the pinniped population involved.

- incidental or by-catch

The volume of incidental catches of seals is if anything even more difficult to assess than the direct harvest volume. It is recommended to see put in place some kind of standardised protocol for the collection of catch data, similar to some of the observer schemes that are already operational in fisheries and on whaling, with the objective of giving an assessment of the true extent of the problem. There is a lot of circumstantial evidence for an incidental by-catch of seals by fishermen, but it is proving very difficult to acquire accurate figures.

- direct regulation of seal numbers (culling)

The South African fur seal is one of the last species where direct regulation of numbers has a major impact on the population. The cull is carried out largely because the seals are perceived as competitors for fish. The most critical question we feel should be asked here is whether the regulation of pinniped numbers in a given population actually leads to the fish that is then not eaten by the pinnipeds, being available to fishermen.

One of the results of a workshop held in Benguela, Angola, was that it did not in fact seem possible to predict in a clear cut way that the killing of 30,000 seals would benefit the fisheries of that specific area.

- effect of fishing activity on food availability

Only a few reports are available in which the possible effect of reduction in prey availability on seal populations have been proposed. Inevitably, the evidence linking observed changes in seal populations to the results of fishing is circumstantial, as is the evidence for detrimental effects of seal predation on catches of fish. This is partly due to the fact that most studies are retrospective and it

are solely the result of overfishing or of environmental changes or a combination of both. In conclusion, it is clear that the relationship between pinniped numbers, fish stocks and fisheries yields is not always a simple one.

3. recommended conservation and management actions

Three different sets of conservation and management actions are recommended: 1) actions that focus on threatened species, 2) actions to evaluate major threats to pinnipeds and 3) actions that improve our knowledge about the role of pinnipeds and their function in the marine ecosystem. The first two sets are directly contributing to the protection of some endangered species and prevent other species from being classified as such in the near future. However, it is emphasized that actions under 3 are also of high priority, since one of the principle objectives of the Pinniped Action Plan is to understand more clearly the functioning of pinnipeds in the marine ecosystem, with the aim of achieving a management system that is multi-species oriented. To that end, its emphasis is on carrying out management-oriented scientific research into pinniped ecology, in three main areas:

- a) Feeding ecology. At present we have very little information on pinniped feeding habits at sea.
- b) The interaction of seals, fish stocks, fishery yields and other components of the marine ecosystem. As mentioned earlier, it is not straightforward to predict how changes in seal populations would affect the fish stocks, the fishery yields or some other parameter, or indeed how changes in the fishery would impact on the fish stocks and in turn on the pinniped population.
- c) The last and most important aim of the plan is the promotion of a more collaborative approach to ecosystem management. There needs to be an integrated management of all components of the marine ecosystem from plankton to whales, using the expertise of scientists from oceanographers to ecological modellers. This is the only way we can hope to answer fully the questions about the effect that human activities have had and have on pinniped populations. Only if we have enough information available will we get the kind of answers that we require on the best mechanisms for responsible management of pinnipeds, allowing scientists to make a strong case for the responsible management of pinnipeds, in the context of an entire marine ecosystem management.