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MEDITERRANEAN ACTION PLAN

First Meeting of the National Focal Points  
for the Specially Protected Areas in the  
Mediterranean

Athens, 1 --4-June-1987-

DRAFT  
ACTION PLAN FOR THE CONSERVATION OF  
MEDITERRANEAN MONK SEAL

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### Introduction

1. The populations of the Mediterranean Monk Seal Monachus monachus have declined rapidly and drastically, and the species is threatened with extinction. Only concerted and effective action by all the concerned countries of the Mediterranean may be able to reverse this trend.
2. Many important aspects of Monk Seal biology and behavior are too poorly known to plan a complete management strategy for the species, but so few seals are left that research on them has become very difficult. The situation is too critical to put off action any longer. Plans must be made using the best data available, and then adjusted if necessary as more information is obtained. It is too late to wait for further research results; action must be taken now, and even now may not be soon enough.
3. This draft action plan contains proposals from various sources which could help to save the Mediterranean Monk Seal from extinction. Scientific opinion is divided as to what is appropriate or unwise. Some possible actions are controversial and may involve some risk to the seals involved. The species is known to be sensitive, and its reactions to close observation or capture are uncertain. However, for a species in immediate danger of extinction, the risk of doing nothing may be even greater, and may justify active intervention as a last resort. Such actions should only be undertaken after every effort has been made to evaluate and minimize the risks involved
4. The major threats to the Monk Seal are killing of adults by fishermen, and human disturbance of breeding areas. Both have increased as men and seals compete for increasingly scarce resources (fish and remote coastal areas). The first priority is to preserve the remaining remnants of the Monk Seal population. The challenge will then be to find that delicate balance between the biological requirements of the Monk Seal and human uses of the Mediterranean and its resources that will allow the species to recover to a viable level.
5. This action plan for the conservation of the Mediterranean Monk Seal outlines both immediate and longer-term actions which, if taken together, may succeed in reducing pressures on the seal population enough to permit a gradual recovery. No one action by itself will be enough. The different components of the management plan are mutually reinforcing and must be taken together to have the best chance of success.

### Reduction in adult mortality

6. An urgent information campaign among fishermen in all areas where the seal still occurs must aim to neutralize their antagonism to the Monk Seal and win their support for protective measures.

7. Governments should institute programmes to compensate fishermen for seal-caused damage or losses, to reduce the motivation for killing seals. Given the small number of seals remaining, the amounts involved should be manageable in the short term until other protective measures take effect. Compensation should be related if possible to the number of seals in the area.
8. The carrying of firearms in fishing boats should be prohibited and this prohibition strictly enforced.
9. Improved fishing nets should be developed which seals cannot damage or become entangled in, and fishermen should receive the assistance necessary to convert to using such nets. Research is needed on techniques for repelling seals from fishing equipment and fishing areas.
10. States that have not yet extended legal protection to the Monk Seal should do so at once, and existing protective measures should be enforced.

#### Isolating seals from incompatible human activities

11. All countries that still have breeding Monk Seal populations should make immediate efforts for the stringent protection of the remaining seal breeding sites.
12. A network of marine reserves should be created across the Mediterranean, covering both existing and potential Monk Seal habitats, so spaced that they can be gradually repopulated as other protective measures take effect and the population recovers. Monk Seal reserves should protect suitable caves or other breeding and resting areas, and should be surrounded where possible by a 40km buffer zone covering major feeding areas. Fishing with nets or other techniques known to threaten or conflict with the seals should be prohibited or controlled in the buffer zone. Coastal development should be restricted to compatible activities, and intensive tourist development should be avoided in these zones.
13. Tourist visits or other human disturbance of breeding sites should be prohibited during the seal breeding season and while the pups are young, particularly in the August-November period.
14. It may be possible to develop the Mediterranean Monk Seal as a tourism resource, but only where complete protection of the species is assured.

#### Research and data collection

15. All countries should launch an intensive programme of data collection about seal populations and behaviour. Every encouragement should be given to the reporting of sightings to appropriate national bodies or focal points, which should in turn make the information available rapidly to the regional network. Remote camera techniques can be used to monitor caves with the least risk of human disturbance.

16. Further research is needed to clarify the relationship between the monk seal and various fisheries, including the true economic effect on the fisheries.
17. Sociological research into the attitudes of various groups such as fishermen towards the Monk Seal may help to define better control measures and information campaigns.
18. Research techniques should be reviewed to ensure that they do not themselves increase the threats to the seal population.
19. All information obtained on the species should be compiled and evaluated on a regional basis, possibly by an expert group under the auspices of the Regional Activity Centre for Specially Protected Areas, and be distributed through an information exchange network.
20. A small number of rescue centres, perhaps one each in the eastern and western Mediterranean, should be established to receive wounded seals and abandoned pups. Captive breeding should be attempted if it can be done without increasing the risk to wild populations. Such centres should be subject to national control and regional expert review to ensure their proper operation in the interests of Monk Seal conservation. Seals saved or raised in captivity should be used to strengthen breeding groups in secure areas.
21. The transfer of young seals from healthy colonies with adequate young to undersized or newly re-established colonies may be an important management option where such seals would in any case leave their colony of origin.
22. Isolated non-reproducing individuals or small groups could be moved to more viable and well-protected groups or combined to achieve sustainable breeding populations.
23. In extreme cases, the transfer of such non-reproducing individuals to captive breeding centres, and/or the artificial insemination of isolated females should be considered.
24. Monk Seals from what may be genetically distinct populations should not be introduced outside their natural range, except as a last resort. Research on possible genetic differences between populations is required.

#### Information Programmes

25. An information programme for fishermen and fishing communities should aim both to reduce the killing of seals and to encourage the reporting of seal sightings and other observations.
26. Special information activities should be developed for tourists and the tourist industry in areas where tourism threatens seal breeding areas.

27. Information materials should be produced for military authorities, industrial developers and the shipping industry concerning actions they can take for Monk Seal Conservation.
28. A widespread campaign for the Mediterranean Monk Seal should cultivate public support for conservation measures.
29. Training programmes should be developed for protected area managers responsible for Monk Seal reserves.

Co-ordination, Review and Finance

30. The Regional Activity Centre for Specially Protected Areas should be given the responsibility to co-ordinate the Monk Seal information network, the development of Monk Seal protected areas, and regional research projects on Monk Seals.
31. The status of the Monk Seal and the content of this management plan should be reviewed by a regional expert meeting every two years, before submission to the meeting of the contracting parties for endorsement.
32. Governments whose local Monk Seal populations have been exterminated should assist countries with remaining populations in the hope that recovery of the species will permit its eventual reintroduction throughout its original range.

ANNEX

SUGGESTED IMPLEMENTATION OF ACTION PLAN ACTIVITIES

33. The following outline of activities regroups the elements of the Action Plan in a format that should encourage their rapid implementation.

Phase I URGENT ACTIONS TO SAFEGUARD REMAINING SEALS.

Action to halt killing by fishermen

34. The extinction rate for small Monk Seal Populations is most dependent on adult mortality and the principal cause of adult mortality is accidental or deliberate killing by fishermen. Monk Seals have been shown to have a significant effect on small-scale inshore fisheries, an effect that has probably been aggravated by overfishing. First priority must therefore be given to changing the bases of fisherman-seal interactions. In essence this means paying fishermen not to kill seals at least until other conservation measures can take effect. The following strategy may provide a practical way to do this.

- a) The caves or other breeding and resting sites used by Monk Seals should be identified and given strict protection. Automatic cameras installed in each cave should provide the basis for determining the number of seals resident in each area.

Estimated costs:

- assistance in creating protected areas \$100,000
- surveys and monitoring of monk seal populations \$ 200,000

- b) The waters used by seals for feeding in an approximate 40km radius from each breeding/resting site should be established as a buffer zone. In this zone large scale commercial fishing should be prohibited. Small-scale inshore fishermen dependent on the area should be licensed and given exclusive rights to fish in the buffer zone. Such licensed fishermen should be provided with nets and other equipment known to present the least danger of accidental killing of monk seals. Fishing methods dangerous to seals should be prohibited. The licensing system should allow adequate control of fishing pressure in the buffer zone. No increase in the number of licenses should be permitted.

- Estimated costs: Establishment of licensing systems: \$ 100,000  
Provision of safe fishing gear: \$ 100,000

- c) Since the seals will probably consume a part of licensed fishermen's catches in the buffer zone, such fishermen should receive regular compensatory payments based on the number of seals resident in the reserve. Such payments should be at least equivalent to the value of fish lost. Fishing in the buffer zone will thus become a means for concentrating an otherwise scarce food supply for the seals, and fishermen should be encouraged to feed the seals. Any seal-caused damage to equipment should also be compensated.

Estimated cost of compensatory payments: \$ 200,000

- d) Licensed fishermen could also be encouraged to take tourists to see the seals in the buffer zones, but not in protected breeding and resting sites.
- e) Fishermen with a vested interest in a growing number of seals will provide the most efficient and economical enforcement of protected area regulations. Licensed fishermen should receive information materials on monk seals and the requirements for their management.

Estimated cost of information materials for fishermen: \$ 100,000

35. The cost of these measures should be shared between governments, international agencies, NGOs, and the Mediterranean Trust Fund.

Information Campaign to save the Monk Seal 1987-88

36. An extensive information campaign throughout the Mediterranean, linked in Europe with European Environment Year, must be launched at once to sensitise the public to the drastic status of the Monk Seal and to mobilise political and financial support for the urgent measures needed. The Monk Seal should be adopted as the symbol of Mediterranean conservation. NGOs, researchers, governments and international agencies should coordinate their information activities for the greatest possible impact. Support for the campaign from the business community should be encouraged.

37. A set of information materials including videocassettes, radio scripts, exhibits, posters and pamphlets should be developed quickly and translated into the appropriate local languages for use by governments, schools and non-governmental organizations. Versions of these materials should be adapted to the following target audiences, fishermen, tourists, the general public, school children, military authorities, and industrial developers and those in the tourism and shipping industries.

Estimated minimum cost for an integrated information campaign  
\$ 250,000



PHASE 2            ACTIVITIES TO SUPPORT THE RE-ESTABLISHMENT OF HEALTHY MONK SEAL POPULATIONS

Regional Co-ordination

38. The following activities require regional co-ordination:

- operation of a regional data collection and information exchange network;
- establishment and co-ordination of regional research projects;
- distribution of information materials;
- assistance to governments with legislation and the establishment of protected areas for monk seals;
- creation of a small expert advisory group;
- preparation of biennial status reports and organization of expert meetings.

This will require the recruitment of a regional co-ordinator to work through the Regional Activity Centre for Specially Protected Areas.

Estimated Cost: US\$ 200,000/annum

Creation of a voluntary fund for the Mediterranean Monk Seal

39. Implementation of the Action Plan for the Monk Seal will require financial support from many sources. In addition to direct government support for certain activities and support from the Mediterranean Trust fund, individual donors and non-governmental organizations should be encouraged to support Action Plan activities through a voluntary fund to be managed by the regional co-ordinator.

Research on fisheries-seal interactions

40. The following types of research projects should be supported:

- data collection on seal movements and population size;
- feeding habits;
- reproductive biology;
- socio-economic aspects of the seals' impact on fisheries;
- improved fishnets, fishing techniques and possible repellents to reduce both seal damage and accidental drownings;
- techniques for safe capture and captive breeding;
- sociological research on attitudes of fishermen and other groups;
- possible genetic distinctions between populations.

Estimated cost of research projects: US\$ 200,000

41. Appropriate sites for a network of monk seal reserves across the Mediterranean should be surveyed over the next 5 years and developed into protected areas supported by the necessary development controls on the adjacent coastline.

Estimated cost of regional supporting measures: US\$ 50,000/annum

Creation of two Monk Seal rescue centres

- 42 Rescue centres for wounded seals and abandoned pups should be established on a subregional basis in the eastern and western Mediterranean.

Estimated cost for facilities and for transport of seals to the centres: US\$ 200,000

Transfer of young or isolated seals

43. Young seals from healthy colonies, and possibly isolated seals under threat should be transferred to build up well-protected breeding colonies. Grouping undersized colonies together may also need to be considered.

Estimated cost: US\$ 100,000

Regional expert meetings on Monk Seals

44. A regional expert meeting should be held every two years to review the status of the Monk Seal and the conservation actions necessary.

Estimated cost: US\$ 30,000 per meeting.