

## WILL THE MEDITERRANEAN MONK SEAL SURVIVE ?

*D. Marchessaux,*

*centre d'Etude des Mammifères Marins. 28 Rue Albert 1er, La Rochelle, France*

The genus *Monachus* is the only one among the true seals to have a tropical and sub-tropical distribution. The three species of monk seals recognized in this genus have widely different geographic ranges. The Mediterranean monk seal (*Monachus monachus*) can now be found only in some remote coastal regions of the Mediterranean, and down the African coast as far as Mauritania. The West Indian monk seal (*Monachus tropicalis*), now probably extinct, lived in the gulf of Mexico and on the Islands of the Caribbean sea. Most isolated of all, the Hawaiian monk seal (*Monachus schauinslandi*) lives on the leeward islands of the Hawaii archipelago.

Today, the world population of the Mediterranean monk seal, which amounts to 600, consists of small groups widely scattered in its geographic range. Although there is no sealing now for this species, it has almost completely vanished from the western Mediterranean, except on the Algerian coasts where about 100 seals are estimated to live. In the eastern Mediterranean the largest concentrations are found in Greece (about 250 seals) and in Turkey (about 100 seals). Outside the Mediterranean only Madeira and Mauritania have significant populations of about 30 seals each.

This disquieting situation has to be related to human activities. Industrial and touristic expansions together with the growth of human population around the Mediterranean seashores have led monk seals to vanish or retreat to remote areas which are not necessarily the most appropriate with regard to the ecological requirements of the species. Even in these remote areas, the increasing human disturbance has no doubt a depressing effect on seal populations. It is probable that the fall of the reproductive rate in this species is linked with these disturbances. The vulnerability to extinction is furthermore increased by incidental kills of these animals. The drowning of seals when they become caught in fishing gears, especially in Mauritania, and attempts on the part of the fishermen to eliminate them by shooting take an important part in reducing populations. Another reason for the decline of seal colonies can probably be found in the increasing pollution of the Mediterranean, although no investigations have been carried out as yet on this matter.

Because of its precarious status, the Mediterranean monk seal needs severe conservation measures. For example, the creation of strictly protected reserves is strongly desirable as this could ensure quietness for monk seal colonies. Very little has been done in recent times and few countries have shown concerns with the monk seal situation. Some conservation measures have been taken by Bulgaria, France, Greece, Italy, Mauritania, Tunisia and Yugoslavia. In any case, the holding of an international conference on the Mediterranean monk seal in Rodos (Greece) in April 1978, appears hopeful as scientists, conservationists and government representatives will meet to discuss the biology, ecology and the measures of conservation to be applied to the species.

The survival of the Mediterranean monk seal is probably linked to the success of this conference !

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