

## The Monk Seal, *Monachus monachus*, Herman 1779 on the west African coasts.

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The presence of the Monk Seal in this region has been known for a very long time and we have some files relating to the exploitation of the populations since the XV Century along the Rio del Oro. Their presence is also attested by the denomination of numerous tongues, capes, bays, as many in Morocco as in the Canaries.

It was Th., Monod (1923) then Gruvel (1924) who described the first colony of Rio del Oro, situated some kilometres at the north of the White Cape. Since 1944, several descriptions were given by many searchers: Morales Agacino, Lefuente, Monod, Cousteau. But they were always short observations made during missions whose purpose were often different from the study of the Seals colony.

It is only after 1960 that Tixerant and A. Abdallahi carried out regular observations about this colony without having them published. Then, after 1970, Maigret and Trotignon indulged in regular observations which coincided with the beginning of the interest shown to this colony by the scientific community (Maigret *et al.*, 1976).

Most of these authors limit their descriptions to the most accessible spot of Las Cuevecillas. However, Postel, in 1950 described a grotto located at the north of Las Cuevecillas and inhabited by seals, that he called 'motherhood grotto' because he observed in it some seals accompanied by baby seals. The confirmation of the seals presence between Las Cuevecillas and Barbes cape was given to us by French crayfish fishermen who have exploited the spiny lobster on these coasts until 1966/70 and who know all the details of it (Maigret *et al.*, 1976). We have had the opportunity of observing, in 1975, along the Aguerguer's cliffs several isolated seals. The same year, R. Soriguer also sighted some seals in the area of this inaccessible coast.

The importance of the Las Cuevecillas colony, therefore, appears variable: J. Y. Cousteau sighted 300 individuals in 1953, while Valverde mentions 200 individuals in 1954, then at the beginning of 1960 the figure 60 (with a maximum of 80) is put forward by Tixerant while this one seems to decrease: 46 in 1969.

Between 1973 and 1975 the repeated visits give variable figures: 45, 50, 25, 15 (Maigret–Trotignon). Each time baby seals are observed near the parents. In 1974 and 1975, the discovery of numerous seal carcasses along the beaches of the region, which never happened in 1970 and 1974, caused serious concern for the future of the colony (Maigret *et al.*, 1976). In 1978 Trotignon observed 45 seals in February and estimated their number in the sector as 60. In June of the same year, he only observed few on the beach and reported the grotto ceiling collapsed, in December he found the grotto empty. In 1980, an aerial observation revealed 13 individuals around the grotto, which led Trotignon (1982) to write:

'On the Saharian waterside which had seen a concentration of the most important herds of monk seals in the world, then which sheltered the last colony of the species, nature has just destroyed, by a strange irony of the destiny, the last nest it offered to these animals ...'.

Knowing very well this coast sector having worked with the French spiny lobsters fishermen, we have never shared the alarming and journalistic pessimism of J. Trotignon. Of course, the grotto collapsed and may be some seals died during this accident, but we have always thought that the colony was not limited to Las Cuevecillas grotto.

The estimation put forward have always been the fact of punctual observations, limited in time and space since only the Las Cuevecillas grotto, the easiest to reach, has been visited. In the north there are almost 300 kilometres of coasts completely deserted, susceptible of sheltering seals and we hoped in 1984 during the second International Conference of the Monk seal held at the Rochelle:

'If we really want to know the status of the Monk seal in this sector, it is necessary to set up an international programme for the study and safe-keeping of this colony. This programme will have to present some logistic means enabling it to explore in detail this coast particularly inhospitable during repeated and sufficiently long missions'.

Now it is done under the care of the EEC and D.

Marchessaux will tell you about the observations that he had the opportunity to do during the year 1985.

A second colony exists at the peak of the White Cape. This permanent colony has always been reduced and the number of seals observed between 1970 and 1975 amounted to 3 or 4 individuals some of which at least seemed sedentary, although the Trotignon's observations in 1978 led us to suppose some exchanges with other groups.

In 1980 the following observations had been carried out:

20.01 E. Kesteloot	6 to 8 adult seals
19.01 J. Maigret	4
12.06 J. Maigret	3
08.11 J. Maigret	8/12 4 of which at the north between the White Cape and the Güerra
02.12 P. Lemoigne	4

In 1981 and 1982, the regular visits haven't brought more information. The number of individuals observed has fluctuated between 6 and 8, this is to say slightly superior to what was observed between 1970–75. Is it the transfer of a part of the Las Cuevecillas further to the collapse? This is really probable.

More at the South, the seals are sometimes noted on the Arguin's bench and in the Greyhound bay. Two individuals have been sighted at the El Zass's Cape in April 1975. The Imraguens fishermen who lived on the Bench, thereby call this species and affirm to see it sometimes at the north of the Tidra's Archipelago and near Arguin. On the other hand, we found some seals dead bodies in June 1974 on two islands of the region: an isolated skull on the Pelicans Islet and the body of an adult male recently dead on the west Kiaone island.

At the south of the Arguin Bench, the monk seal is known from a pit situated at the south of Timiris's Cape, by 19°12'N, where the French spiny lobster fishermen are said to encounter frequently some individuals.

Then, the animal was even seen at the Senegal: at the Maringouins (delta of the Senegal) in 1960, Monod sighted it at Dakar, and Van Bree (*in litt.*) mentions the presence of two young and one subadult in Dakar too. More recently, we observed it in 1974 at the Madeleine's Islet and in 1976 near Dakar (Dupuy and Maigret, 1976).

The presence of the Monk seal at the Green Cape's Island doesn't seem to be confirmed. Following that information gathered in 1980, we have questioned several persons who have a very good knowledge of these islands; especially J. Cadenat who made the ichthyological inventory during the fifties, and the French spiny lobsters fishermen's bosses who

worked on it until 1963. None has never seen here any seals that they know very well since simultaneously they worked along the western Saharian coasts.

The observations signalled might be:

—either the fact of erratic animals as the ones met at Dakar,

—either the recent settlement of a colony on these islands coming from the Rio de Oro's colony.

It seems however that the first hypothesis is the most probable.

### Conclusions

The Saharian meridional coasts represent as far as their isolation is concerned, the best chance of survival for this colony that we have seen remaining relatively steady since 1960 and which still constitute in the early eighties, the most important concentration of monk seals. The conflicts in this region since 1976 have moreover emphasized this isolation and have stopped the coastal fishery, enabling therefore the fishes and spiny lobsters supplies reconstitution of the region, very overexploited before 1975. Therefore we can think that the dispersion of the seals observed in the seventies towards the Senegal, the Green Cape islands and off-shore would have been caused by this decrease in the supplies along the Rio de Oro's and Mauritanian coast, obliging the seals to go always further to search for their food.

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