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**ESTABLISHMENT AND PILOT OPERATION OF
A NETWORK BETWEEN THE MEDITERRANEAN
MONK SEAL CONSERVATION PROJECTS**

Final report
January 2000

Participants:

- ✓ MOm, the Hellenic Society for the Study and Protection of the Monk seal
- ✓ Parque Natural da Madeira
- ✓ Universitat de Barcelona, Facultat de Biologia, Departament de Biologia Animal

A PROJECT FINANCED BY THE EUROPEAN COMMISSION
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1. Introduction

The Mediterranean monk seal, *Monachus monachus*, is a highly endangered species and it is considered a species of high Community interest, since it is listed as a priority species in the EU Directive 92/43.

Within the European Union, the most important remaining monk seal populations are found in Greece (estimated at about 250 individuals) and in Madeira (estimated at about 20 individuals). In addition, a concentrated population of approximately 100 animals is also found at the Northwest coasts of Africa (Western Sahara).

Taking into consideration that the total world population of this species may not exceed 500 individuals, the importance of the above mentioned populations is evident.

Over the last decade numerous projects for the conservation of this species have been implemented in a number of European countries often with the financial contribution of the European Commission.

Although most such projects have had positive results, a frequently acknowledged drawback has been the limited communication between the various projects conducted in different countries. In addition, within the Executive Summary of the Final Report of the “Evaluation of the Actions Taken to Protect the Mediterranean Monk Seal” it is clearly recommended that “*urgent action should be taken in order to establish effective link between the Greek the Spanish and the Madeira project in order to facilitate rapid exchange of information*”(The Monk Seal Audit, B4-3040/96/000408/MAR/D2, Final report, p.12).

Therefore, a program for the establishment of a network promoting the exchange of information and experience between 3 Mediterranean monk seal conservation related LIFE funded projects (Greek, Portuguese and Spanish) has been planned and executed during 1999, through an EC, DG Environment financed project.

2. Main Objective of the Project

The main objective of this project has been the establishment and pilot-operation of a network for exchange of information and experience among three monk seal conservation related projects, co-financed by the European Commission, under LIFE - Nature. The rationale for the establishment of this network was to increase the co-operation among the executant bodies, so as to advance the conservation of the species and its habitat, as it was also suggested by the Monk Seal Audit.

3. Activities Conducted

The establishment of the proposed network has been initiated by the reciprocal exchange of experts from each of the 3 executant bodies. These bodies were:

- 1. Parque Natural da Madeira**
- 2. Universitat de Barcelona, Facultat de Biologia, Dept. de Biologia Animal**
- 3. MOM/Hellenic Society for the Study and Protection of the Monk Seal**

During the preparatory phase of the project the exact time-schedule of each visit has been defined among the experts, taking under consideration each project area's specific circumstances, the weather conditions and the experts' already existing project obligations. Furthermore, the visits were organized, by arranging the travel details of each guest expert and the program of each visit, in order to consume, as fruitfully as possible, his/her time in the host project area.

During the project period, one expert, a senior member of each executant team traveled to the headquarters and the field areas of the other two projects. During each visit, the host executant team provided the guest expert with the opportunity to be introduced into, understand and experience:

- the rationale,
- the plan of operations,
- the methodology,
- the field and laboratory techniques, and
- the field conditions

of the host's project.

More specifically the following visits were conducted:

- 1. Mr. Panos Dendrinis** from MOM visited the Natural Park of Madeira (August 1999).
- 2. Mrs. Rosa Pires** from Parque Natural da Madeira visited MOM in Greece (September 1999).
- 3. Mr. Manel Gazo** from Universitat de Barcelona visited MOM in Greece (September 1999).

4. **Mr. Panos Dendrinis** from MOM visited the University of Barcelona team in Spain and in Mauritania (October 1999).
5. **Mr Fernando Aparicio** from the Foundation CBD-Habitat visited the Natural Park of Madeira (October 1999).
6. **Mr. Costa Neves** and **Mrs. Rosa Pires** from Parque Natural da Madeira, visited the University of Barcelona team in Spain and in Mauritania (October 1999).

Each guest expert, at the end of his visit, prepared an activity report as a summary account, depicting the specific topics discussed and presented during the visits. All respective activity reports are included in the Annex.

Finally, representatives of all teams participated in a final meeting held in Brussels on the 21st of January 2000 and discussed and evaluated the following:

- The establishment of the network
- Results/ benefits that arise
- Technical difficulties encountered in the implementation of the network
- Proposals for the advancement of the network.

In this meeting, the following officials from the European Commission, DG Environment were present: Mr. F. Papoulias, Mr. C. Romao and Mr. B. Palacios. The representatives from the three monk seal projects' teams were: Mr. V. Zavras, Mrs. R. Pires and Mr. M. Gazo.

During the meeting all representatives from the three monk seal projects had the opportunity to briefly present the activities conducted (see Annex) and a general assessment of the network's operation, stressing that the overall experience gained was very positive. Furthermore, they emphasized the following points:

- The network provided the opportunity to the participants to familiarize themselves with all relevant aspects of the three executant bodies. In particular, they had the chance to understand how these bodies of different nature (a NGO, a Ministry and a University) are conducting projects with a common objective, namely the conservation of an endangered species and its habitat.
- The network visits provided for the first time the opportunity for monk seal researchers to meet in the field for an extended period of time and discuss extensively and exchange experiences.
- Incorporating each guest expert in the respective host field teams, gave the possibility to have a much better understanding of the work conducted in each

area. In addition, personalization of the contacts between field researchers is facilitating the future cooperation between the executant bodies.

- Following the experts' visits, the information acquired during each trip has been disseminated to other members of each organization, thus multiplying the positive effect of the network's operation

4. Overall assessment/ Technical Difficulties

Taking into consideration the overall project operation and the respective conclusions drawn by each expert and included in each activity report (see Annex), and the results of the Final Meeting in Brussels, it is evident that the initiative to establish a monk seal projects Network has proven to be a positive contribution to the protection of the species.

It should be mentioned, that even though, all visits included expeditions with difficult field circumstances and unpredictable weather conditions, the organizational structure, the experience and infrastructure of all the host teams allowed for the best organization of each visit.

Furthermore, for the future operation of such a Network, it is useful to mention certain difficulties encountered during its operation:

- It was commonly agreed that the duration of the visits (10 days) was sort considering the number of different topics included in the agenda of each visit. This was further intensified by the fact that such an endeavor was planned for the first time.
- Since all network partners were project executants, their heavy workload made the arrangements complicated and time consuming. Indicative is the fact that the detail time schedule of all visits was completed after 6 months of regular communication between the partners.
- The above point increased the administrative work necessary for the operation of the Network (not foreseen in the initial budget).
- The lack of an advanced payment in combination with the method of reimbursement of the expenses of the participants (paid first by each team and received following the approval by the Commission of the financial documentation) created a financial burden to all partners.

5. Results

Taking into consideration the different conclusions mentioned in the above sections, it is evident that this first effort for the establishment of the Network has borne significant results that can be summarized as follows:

- The knowledge of the guest experts, on the overall conservation strategy applied at the different regions/countries, has been increased.
- The above knowledge has been transmitted to other members of the respective teams of each expert.
- Direct contact between the experts involved in similar fields within the different projects, has been established.
- Co-operation between the projects teams, both at the bilateral and the general level, has been improved.
- Although the time of each visit was limited (not more than 10 days), the guest expertise has been increased in certain fields of seal conservation.

It has also become evident and it is considered as priority, that in order to achieve goals, such as the advancement of the harmonization of the basic principles of the conservation strategies applied and the avoidance of overlapping efforts between projects, the operation of the network must be continued.

6. Future of the Network

During the final meeting in Brussels apart from all above topics and results, the future of the specific network was also addressed. The following provide a summary of the points discussed:

- It was commonly acknowledged that the continuation of this specific network is of great importance for the conservation of the monk seal and its habitat.
- The participants to this Network should fulfill the following prerequisites:
 - ✓ All partners must be practically involved in the monk seal conservation *in situ*
 - ✓ All partners must have the willingness to share their knowledge and expertise, but also to obtain such experience from the other partners.
- During the next two years an effort must be invested to exchange expertise in specific topics, such as conservation strategy for specific areas, rehabilitation protocols and techniques, alternative monitoring methodologies and awareness tools and activities targeting local human populations.

7. Recommendations for Networking between LIFE projects

In terms of extending specific conclusions from the operation of this Network to other Networking efforts between LIFE project, the specific characteristics of the monk seal project Network must be considered.

The current monk seal conservation projects Network, it is characterized by the exchange of expertise and knowledge through *in situ* visits between partners followed by evaluation and assessment of specific thematic topics. The overall aim of the existence of this network is to advance the protection of an endangered species and its ecosystem. Thus the conclusions drawn may be applied in cases of networks of similar nature.

The following recommendations can be made:

- Networking should be promoted by providing incentives to potential partners and should not be imposed or be obligatory.
- Networking must have clear and specific objectives that all partners can agree upon them.
- Networking should be designed taking into consideration and rationalizing the resources of the participants. Creating complex structures that require extensive administrative procedures (formal protocols of communication, extended reporting, monthly newsletters, etc) should be avoided.
- Participants project obligations should be a principal factor in the design and the duration of a Network.
- If the network consists of more than two partners, it is better if the host group can organize the visit of all guests at the same time. This will improve considerably the contacts between all participants, since besides gaining experience on the work done by the host institution, all guests can discuss at the same site specific issues.
- Since scheduling field visits is difficult and expensive it is necessary to maximize the benefits per visit. Thus:
 1. Schedule visits of adequate duration
 2. Choose the best season that will allow covering all topics of interest.
 3. Take into consideration weather and field conditions that may obstruct the visits planned.
- Provide guest experts information on the site and the host team previous to the visit. Information should cover at least the following topics: details on the field site, fieldwork conditions, report or papers published by the host institution.

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ANNEXES

ANNEX 1

ACTIVITY REPORT OF THE VISITS TO MADEIRA AND WESTERN SAHARA BY GREEK EXPERT

By: **Mr. Panos Dendrinis**, Biologist, Field Research Coordinator
MOM/Hellenic Society for the Study and Protection of the Monk Seal

ANNEX 2

ACTIVITY REPORT OF THE VISITS TO GREECE AND WESTERN SAHARA BY MADEIRA EXPERTS

By: **Mrs. Rosa Maria Pires**, Biologist, Coordinator of monk seal project
Parque Natural da Madeira

ANNEX 3

ACTIVITY REPORT OF THE VISITS TO MADEIRA BY SPANISH EXPERT

By: **Mr. Fernando Aparicio**, Biologist
Fundación CBD-Habitat, Spain

ANNEX 4

ACTIVITY REPORT OF THE VISIT TO GREECE BY SPANISH EXPERT

By: **Mr. Manel Gazo**, Research Biologist
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Animal

Annex 1

ACTIVITY REPORT OF THE VISITS TO MADEIRA AND WESTERN SAHARA BY GREEK EXPERT

**By: Mr. Panos Dendrinis, Biologist, Field Research Coordinator
MOM/Hellenic Society for the Study and Protection of the Monk Seal**

1. INTRODUCTION

In the framework of the project “Establishment of a network between Mediterranean monk seal projects” (funded by the European Community under the contract B4-3040/98/000648/MAR/D2) I visited the areas of Madeira island in Portugal and Western Sahara in NW Africa, in August 1999 and October 1999, respectively. According to the rationale of the project, the main aim of my visits was to have a close view on the objectives, plan of operation, methodology and field techniques of each group working with the species, as well as, to experience the different field conditions in each area. During my stay at the two different sites, I tried, discussing extensively with the staff members of the different projects, to exchange, as much as possible, information on different issues like methodology, efficiency of techniques used, constraints, etc.

2. SCHEDULE PROGRAM OF THE VISIT TO MADEIRA

4th of August

Arrival at Madeira (Funchal).

5th of August

During this day the following visits and meetings took place:

- Visit to the headquarters of the Parque Natural da Madeira in the Botanical Gardens of Funchal. During this visit I was guided to the different departments of the organisations by Mrs Rosa Pires, the biologist who is responsible for the monk seal project on the protected area of Desertas islands.
- Meeting and discussion with Mrs Virginia Valente, who is responsible for the public awareness and environmental education activities.
- Meeting with the director of the Parque Natural da Madeira, Mr Henrique Costa Neves. With Mr Costa Neves and Mrs Rosa Pires we discussed extensively about how the monk seal protection activities are organised in Madeira and about how the Parque Natural da Madeira is administratively organised (different departments, personnel, monitoring and guarding system, legal status, infrastructure etc.).
- Visit to the area of Camara dos Lobos; the area was used in the past by the monk seals, while nowadays a large fishermen community is living here.

- Visit with Mr Costa Neves and Mrs Rosa Pires to the information and environmental education centre (CICNA) in Funchal and discussion on its operation.

6th of August

During this day I was guided by Mrs Rosa Pires at different protected sites throughout the island of Madeira. Finally we visited the Natural Reserve of Ponta Sao Lorenzo (Most eastern part of the island of Madeira). In the northern coast of this area potential monk seal habitats (sea caves) have been identified by the research team of the Parque. We spend the night at the guarding facilities of the Reserve, where I had the chance to discuss the guarding activities with the staff.

7th of August

Most of this day was spent onboard “Buteo”, the sailing vessel of the Natural Park of Madeira. We circumnavigated the northern coasts of the protected area of Ponta Sao Lorenzo, where potential monk seal habitats (sea caves) have been identified. In the afternoon we sailed to the protected area of the Desertas islands. In Greece, MOM’s field research group uses as its field base a similar to “Buteo” sailing vessel, “Odysia”. So it was extremely interesting for me to discuss, during the sailing, with the captain of “Buteo” on the use of such a boat in the project, the local sea conditions throughout the year and several technical issues. Arrival on Desertas islands late in the evening. I had an initial introduction to the habitat and the way the team is organised in the field.

8th of August

Onboard “Buteo”, we circumnavigated the south-western coast of the island Deserta Grande and the island of Buzio. The above areas are located in the integral reserve. One fishing boat was detected in the reserve and I had the chance to observe the methodology of patrolling, detecting, approaching and informing the vessels in the protected area. On the same day I was guided through the field installations of the team and discussed in detail about field technical matters with Rosa Pires and the rest of the field staff.

9th of August

Visit to the northern part of the protected area and, in particular, the island of “Ilheu Chau”. At the northern tip of the island we visited a lighthouse, where the team has some facilities. In addition, we visited some seal observation points on this island and we discussed on the seal monitoring methodology of the team. In the afternoon I accompanied the field team during an expedition at the south-eastern coast of the main island (Deserta Grande), in order to record suitable terrestrial habitats of monk seals (sea caves). This provided the opportunity to have a close look at the terrestrial monk seal habitat in this area and on the field methodology used by the research team.

10th of August

Meeting with Mr Costa Neves, who came to the Reserve with the vessel “Buteo”, accompanying a team of the local TV station RTP-Madeira. During his staying we had the opportunity to discuss on the establishment and the future operation of the network for the Mediterranean monk seal. In addition I was interviewed by the TV team on the subject of my visit and the importance of the establishment of such a working network between the different European teams working on the conservation of the monk seal.

11th of August

Participation in the monk seal monitoring. According to the methodology that the field team follows, they have organised 5 hours shifts (observatories) at selected observation points, in order to record the presence of any seal swimming in the surrounding area. I participated in the observatory that took place at the area of Caliau Des Areias at the south-western side of Deserta Grande. This is one of the areas where the most of the monk seal sightings have been recorded, probably because monk seal breeding caves are located here. Indeed, during the observatory, one individual recorded swimming in front of the entrance of a seal shelter (sea cave).

12th of August

On this day I visited the top of the main island (Deserta Grande), so I had the opportunity to have a general view of the protected area, as well as, to be introduced to other aspects of the biotope (geology, vegetation, fauna, etc) and its management. During this day, I also had the opportunity to scuba-dive near the south-western coast of this island in order to have a close look of the underwater environment and the coastal sea fauna of the area.

13th of August

Departure from Desertas islands to Madeira.

14th of August

Departure from Madeira to Greece.

During the visit, a complete series of photographs (slides) was produced covering extensively different themes (monk seal habitat, seal individuals, team's facilities and equipment, methodology and techniques).

After the visit, a detailed presentation with slide show and extensive discussion took place in order to inform my colleagues in MOM on the experience gained during the expedition.

3. SCHEDULE PROGRAM OF THE VISIT TO SPAIN & MAURITANIA

28th of September

Arrival at Barcelona, Spain.

29th of September – 1st of October

During these three days that I spent in Barcelona, I had the opportunity to meet several members of the research group of the University of Barcelona (GRUMM) and discuss with them on different issues concerning their work. The persons I met were: Prof. Alex Aquilar (head of the group), Mr. Manel Gazo, Mrs Teresa Pastor, Mrs Gema Cantos, Mrs Assumpcio Borrell, Mrs Anna Andreriu. Different topics were discussed with the above researchers, such as, the methodology that they are using on collecting data, the treatment of these data, field and laboratory techniques, up to date results, etc. In addition during my staying there, they gave me the opportunity to present a slide show referring the conservation strategy followed in Greece for the species, the field work conducted by MOM's research group, as well as, the respective results.

2nd of October

Travel from Barcelona to Nouadibou, Mauritania, with Manel Gazo and Gema Cantos.

3rd of October

First visit to the seal caves area, located at a distance of about 10 km to the N-NE from the town of Nouadibou. In the same area the base camp installation of the research team is located. Through the preinstalled TV cameras, we observed a number of about 20 individuals of different stages using cave No 3. This cave is mostly used by the animals after the die-off in summer 1997. Return to Nouadibou and preparation of the equipment (TDR's, tags etc), in order to move the next day to the camping site.

4th of October

With Manel Gazo, Gema Cantos and Esteve Grau, the field responsible biologist of the team, we travelled to the camping site. I had the opportunity to see in detail the facilities of the team and discuss with them the field conditions, the field techniques used (for the seal population monitoring, the rehabilitation etc.). We visited again the cave No 3, where we observe some animals swimming in front of the cave entrance and some others resting inside the cave (through the TV camera). In addition, during this day I descended to cave No 7 for the first time with Esteve Grau and Manel Gazo, using the climbing equipment.

5th of October

During this day, I descended to cave No 3 with Esteve Grau and Manel Gazo. During this visit to the cave, I had the opportunity to have a close view of the structure of the habitat and of some individuals of this monk seal population. Furthermore, I followed the procedure that this team follows for approaching, sampling and tagging the seals.

6th of October

Monitoring of the seals from the top of the cliff and through the TV camera installation. Discussion on the photo-identification methodology that the team uses.

7th of October

Second visit to the cave No 3. Approach, sampling and tagging of one new-born pup. Return to Nouadibou.

8th of October

Visit to the Capo Blanco satellite reserve of the National Park d' Arguin of Mauritania. One adult male observed feeding near the coast.

9th of October

Return to the caves area. Visit to the cave No 3, approach, sampling and tagging of one more new-born pup.

10th of October

Last overnight stay at the camping site.

11th of October

Survey of the coastline, with the members of the team Gema Cantos and Manel Gazo, in order to ascertain the existence of any dead animal washed out on the beach. One dead new-born monk seal pup was found and inspected, a couple of kilometres southern of the cave area. During my stay at Nouadibou, I also had the opportunity to meet and discuss with the Mauritania scientists of CNROP and the responsible for the Capo Blanco satellite reserve of the National Park d' Arguin.

12th of October

Departure from Nouadibou.

During the visit, a complete series of photographs (slides) was produced covering extensively different themes (monk seal habitat, seal individuals, team's facilities and equipment, methodology and techniques).

After the visit, a detailed presentation with slide show and extensive discussion took place in order to inform my colleagues in MOm on the experience gained during the expedition.

4. OVERALL ASSESSMENT OF THE VISITS

Taking into account the rationale of this project, I found the results of the above visits more than satisfactory.

As MOm's field co-ordinator for the last ten years, I have been involved in the co-ordination of a variety of conservation projects and activities (monitoring of the seal populations, collection of data on the biology and ecology of the species, establishment and safeguarding of protected areas, etc.). Therefore, it was very interesting to observe closely similar activities taking place in different areas, important for the monk seal conservation.

Furthermore, I found it very useful to discuss in the field with our Spanish and Portuguese colleagues on their methodological approaches and results achieved up to date. It should be mentioned that the good organisation, the hospitality and the willingness of the members of both teams to present all issues in detail, gave me the opportunity to be introduced and to experience, within a short time period, the field conditions, the field techniques and the overall methodology applied at both project sites.

Noteworthy to mention in particular from my visit to Madeira, was the opportunity to learn and discuss in some detail the organisation of the management of the protected area of Desertas islands (legislation, guarding system, conflicts with local fisheries, information and sensitisation of the general public and the visitors).

Accordingly, during my visit to Mauritania I had the opportunity to observe the implementation of the team's overall research plan and to have a useful close look at specific data collection techniques (tagging of pups in the wild, usage of video cameras).

In my opinion one of the most important results of the visits was the improvement of the relations between the scientists of the different projects, which I consider as a very useful and important working base for the future operation of monk seal conservation projects.

Annex 2

ACTIVITY REPORT OF THE VISITS TO GREECE AND WESTERN SAHARA BY MADEIRA EXPERTS

By: **Mrs. Rosa Maria Pires, Biologist, Coordinator of monk seal project
Parque Natural da Madeira**

1. INTRODUCTION

The present network was established with the proposal to exchange information and experiences between teams working in situ on the Mediterranean monk seal conservation, having into account that this can contribute greatly to the conservation of this species.

In this way, two Madeira team members had participate in this network - Rosa Pires and Henrique Costa Neves, a biologist and the Director of Parque Natural da Madeira, respectively. The first one visited Greece, and both the Western Sahara. The visits to Greece and Western Sahara - Mauritania, were performed from the 13th to the 22nd September and from 23rd to the 27th October, respectively.

In Greece, the host executant body was MOm (The Hellenic Society for Study and Protection of the Monk Seal), a non-governmental organisation that has as the main objective the study and the preservation of the monk seal. Here the visit was programmed looking for the involvement on the activities and with the people working with the monk seal.

In the same way it was developed the visit to the Western Sahara- Mauritania, conducted by the Spanish team, composed by some elements of the marine mammal group from Barcelona University and the CBD-Habitat Foundation, which are conducting, actually the monk seal research and monitoring in Cabo Blanco.

2. SCEDULE PROGRAM OF THE VISITS

2.1.TO GREECE

13th of September

Arrival at Greece (Athens).

14th – 16th of September

At 14th September was the embark on the "IFAW-ODYSSIA" boat to follow and participate in the MOm's work in what concerns the monk seal monitoring and patrolling of the protected area, for 2 days. The team was composed by the hosts of this project in Sporades (Eugenia Androukaki, Panos Dendrinou and Eleni Tounta), Costas, who take care of the boat, Manuel Gazo and me.

In the first day, after the arrival to Piperi Island, we visited some caves without seeing monk seal evidences. In the night the MOM guards, that passed the day patrolling the protected area and we, anchored the boat on Planitis bay in Kira-Panagia Island. Here, the wardens made a patrol to check a denunciation about someone fishing in the area, without results.

In the second day we returned to the Piperi to visit the island. Walking there we could confirm its natural value. Mostly Aleppo pine trees and herbaceous plants compose the vegetation of this island. The Falcon *Falco eleonora*, was the bird observed more often. This migratory bird arrives to these islands in early summer. It makes the nest on the cliffs and rocks.

In the afternoon, we continued the cave survey, on Piperi. Then we went to the NW of Alonnisos and to North of Skopelos to visit some caves. In Piperi we observed a fat female resting under water inside a cave without beach. When the female detected our presence she left the cave and went to the open sea. The caves observed in Sporades are much smaller and exposed than the caves of the Desertas Islands used by seals.

In the second night we anchor again the boat in Kira-Panagia, but this time on the Agios Petros bay. In the arrival to Alonnisos, in Steni Vala, we visit the Seal Treatment and Rehabilitation Centre.

17th of September

Visit to Biological Station in Gerakas. Here Manuel Gazo made a presentation about the Monk seal in Mauritania and myself about Parque Natural da Madeira and the Monk Seal in Desertas Islands.

19th of September

Participation in the patrolling on "Alonnisos" boat until the Piperi Island. In this day, as in the others, nothing wrong was observed. Profiting the trip to this island we went to visit the caves again. On the same cave where a monk seal was found on the 15th September, we observed a pup on the beach – it was the first pup observed this year. The female was nearby in the water making vocalizations.

20th to 22nd of September

Departure from Allonisos and arrival to Athens.

I meet the MOM team in its office. These days were dedicated to the change of information in what concerns methodologies of monk seal study and conservation. For that I had specific meetings with all the people from MOM, explaining the function of the organisation and its method of working.

In the last day I made a presentation to the MOM team about the Parque Natural da Madeira organisation, its objectives and the work with the monk seal.

2.2.TO MAURITANIA

23rd of October

Arrival to Nouadibou.

Visit to the Satellite Reserve of Cap Blanc. Here we visit the station that was built in 1986, to be used for monk seal sensitization and to support the surveillance of this reserve. This station is now close without any use.

Latter we walk down the beach where the six black male's seal used to rest before the mass mortality

On the Levrier Bay, it was possible to observe the fishery fleet from this area, once it was the closed season. Mainly foreign industrial boats compose the fleet.

24th of October

On the morning we visit the National Centre for Oceanographic and Fisheries Research (CNROP). Here we had a meeting with Dr Azza Jidou, where we exchange ideas about the Recovering Plan for the Monk Seal on the eastern Atlantic presented by the Environment Ministry of Spain and the CBD-Habitat Foundation. After this, we had a meeting with the CNROP Director and a guided visit to the CNRP installations. Azza Jidou presented the CNROP aquarium where exists a seal rehabilitation center, and Abou Sidi Ba the CNRP laboratories. In the afternoon we went to the camp, located just on the top of the cave number 1, from where the Spanish team works on the seals. Here, we met Esteve Grau and Gemma Canto that were relived by us and Manuel and Fernando.

In this day we made an assessment of the area, walking from cave 1 until cave 3. In front of the cave number 1, we saw a female seal. The cave was being used by a small group of animals. A rock fall had collapsed the cave number 2. The cave number 3 is the most important cave since it, is the maternity cave. In front of this one we observed 3 females and 1 black male seal.

Manuel made the control of the seals inside of the cave number 3 using the rappel method - keeping hanging from the top, in a level, which allows the observation to the inside of the cave. The "spray" from the sea difficult this observation. Nevertheless it was observed some adults animals and only 2 pups from the 8 that were born before the sea storm started. This is the highest cause of the pup's mortality. The pups can die crashed on the rocks by the strong waves, chiefly because with this weather the sandy beach can be removed and the pups lose the place to rest.

In the camping we observed the rehabilitation unity that was build in 1997 when the mass mortality occurred. It's composed by a room with more or less 5x5m, with a swimming pool in the centre.

25th of October

On this day, Gemma and Estevan substituted Manuel and Fernando on the camp. Then they explain us about their monk seal monitoring and study the methodologies used and its objectives.

We tried to observe the cave number 3 from the camera monitor, without success. The founding of waves near the coast was too strong.

In the afternoon we went to visit the Soriguer´s cave, named in 1976 after SORIGUER reported there some seals. It is an open cave with a sand beach about 60m wide and 30m depth.

With the low tide we used the rappel system to look the cave number 3 inside. Despite the "spray" on the cave it was possible to observe some females, juveniles and one black male resting. When we were hanging on the rope the seals in the water had a curiosity attitude, staying down to look us.

26th of October

In the morning we went for a patrol along the beach located south of the caves. The objective was to look for some monk seal dragging after the storm.

In the afternoon we came down to the cave number 1, but the surge on the coast do not allowed us to visit the beach cave.

On this day we meet Joan Worms the scientific adviser of the National Park of Banc D´Arguin, who is one of the person involved on the action plan for the monk seal conservation in Mauritania.

27th of October

The host team and we had a meeting to discuss our point of view about the action plan for the monk seal conservation in Mauritania, and also to make an evaluation of our visit to the Cap Blanc colony.

3.OVERALL ASSESSMENT OF THE VISIT

Both visits were extremely satisfactory and constituted an enriched experience. The way they were conducted allowed us to know the methodologies and strategies used for the monk seal conservation in accordance to the reality of each place.

In Greece, the participation on the fieldwork (monk seal monitoring and gardening of the protected area), visits to the information centers, and the exchange of information with most of the MOM´s members was very interesting and useful. Good ideas in what concerns the strategies for the environmental education were taken, and it was very important the information about the monk seal rehabilitation, in which the Parque Natural da Madeira do not have yet many experience.

In Mauritania, besides the short period of the visit, it was possible to observe the problematic situation of the monk seal there, caused by effective threat of the fisheries

and storms, and to know the methods and technologies used there to study the monk seal colony. One result of this it was the improvement of our method of photo-identification. There, we have also the opportunity to participate on the meeting about the Recovery Plan for the eastern Atlantic Monk Seal, which is essential to the conservation of this colony.

The general result of this network was extremely positive, not only by the practical experience on other monk seals realities, but also for the personalization of the contacts with the organisations.

As main conclusion, this kind of initiatives, if well organised, like it was, can contribute for sure to the monk seal preservation. In this context, it will be important the continuation of this project having in view the acquisition of specific information in accordance to the needs of each team. This means the information optimization and increase of co-operation for the monk seal conservation.

Annex 3

ACTIVITY REPORT OF THE VISIT TO MADEIRA BY SPANISH EXPERT

By: **Mr. Fernando Aparicio, Biologist**
Fundación CBD-Habitat, Spain

1. INTRODUCTION

During year 1999, a project funded by the European Community DGXI (under LIFE-NATURE) has been developed to exchange information and experiences among the three teams (spanish, greek and portugese) working on Mediterranean monk seal conservation.

The objective of this project was to increase co-operation among the teams and to improve, therefore, the effectiveness of the species and its habitat conservation. To achieve this goal, mutual exchanges of experts from each of the 3 executant teams have been performed.

During each visit, the host executant had to supply to the guest expert the opportunity to be introduced, understand and experience: the rationale, the plan of operations, the methodology, the field and laboratory techniques and the field conditions, of their respective project.

In this report are stated in a schematic way the program of activities developed during the visit of the Spanish team member Fernando Aparicio García (Fundación CBD-Hábitat) to the Madeira archipelago, and a evaluation of the results obtained during this exchange.

The visit was performed from the 16 to the 22 of October, and Rosa Pires, biologist of the Natural Park of Madeira assisted the visitor in every moment. Thanks to this person assistance, to the collaboration of the rest of the Park technicians and to a perfect organization, the guest could deeply meet the different aspects related to monk seal conservation in the region.

2. SCHEDULE PROGRAM OF THE VISIT

During these days, the transfer of knowledge and experiences was combined with visits to important places for the species, specially those where the current conservation efforts are being developed. The program of activities performed is detailed as follows:

1st day:

- Trip to Madeira
- Introduction of the team and communication of the activities plan for the next days.

2nd day:

- Visit to the coastal habitats of Madeira island with historical presence of monk seals (wolves chamber, north coast,...)
- Visit to the marine reserve of Rocha do Navio
- Run through the laurisilva forests of the inner part of the Park.

3rd day:

- Visit to the CICNA (Information Centre for the Conservation of Nature). Introduction by the technicians to the activities being developed to aware local population to their natural environment
- Shipment in the “Buteo”, ship property of the Natural Park of Madeira. Visit to the marine reserve of Garajau and to the Natural reserve of Ponta do Sao Lourenço. Night in this last reserve.

4th day:

- Run in boat through the north coast of Ponta de Sao Lourenço where occasional sightings of seals are produced and where exists abundant caves of volcanic origin.
- Exploration of one of these caves by personnel of the park
- Navigation around the Natural Reserve of the Deserta Islands (Ilhéu Chao, Deserta Grande and Bugio) to meet the current habitat of the species (coastal zone and caves) and to meet “in situ” the conservation and monitoring measures adopted.
- Night in Doca, the permanent vigilance station located in the west coast of Deserta Grande.

5th day:

- Trip back to Madeira due to the bad sea conditions and to the unfavourable weather reports for the next hours.

6th day:

- Visit to the central offices and facilities of the Natural Park in Funchal. Exchange of reports and bibliography about Mediterranean monk seal.
- End of the information transfer about the species conservation strategy in Desertas.

7th day:

- Trip back to Madrid (Spain).

3. OVERALL ASSESSMENT OF THE VISIT

The activities mentioned above and the conversations with several local technicians and managers, have allowed to obtain a clear idea about the organization, substructure and work guidelines of the Natural Park of Madeira, as well as about the different marine and terrestrials protected areas of the archipelago (declaration, objectives, management and protection measures adopted, etc.). But, over all, these activities have allowed to comply with the visit end which was to meet with a deep enough level, the aspects related to monk seal conservation in Madeira archipelago.

Specifically and specially, the following subjects have been discussed:

- Historical information about the species
- Historic and current habitat of the species in Madeira (included visits to the most interesting locations)
- Current situation of the species in the archipelago
- Conservation strategy
- Monitoring and control methodology of the colony
- Habitat and species protection (creation of protected areas, vigilance mechanisms, prohibition of the use of nets in the archipelago, etc.)
- Popularising of the species situation and awareness of local populations

It is necessary to mention the perfect organization and the great inters showed by the personnel of the Natural Park of Madeira, especially by Mr. Henrique Costa Neves and Mrs. Rosa Pires who assisted the visitor in every moment of the visit.

The exchange experience has been totally satisfactory from the point of view of the visitor. The habitat, the human environment (economical, social, cultural and political), the monk seal problematic and the conservation measures adopted until today in Desertas islands are totally different than those in western Sahara. The knowledge of both scenes and the experiences contributes to improve the comprehension of the species life strategy, its response capability in the face of different situations and the possibilities of the available conservation tools.

The personal treatment among the members of the different teams will allow a greater cooperation and coordination in the future. The information exchange will allow to

diminish the duplication of efforts, at the same time that unify approaches and actions in the conservation strategies of the different populations.

It has been specially interesting, from the Spanish team point of view, to meet the details about habitat protection of seals in Deserta islands and Madeira, complemented with the removal of fishing gears which were not compatible with the presence these animals in the region. Everything achieved without social conflicts of importance, which would have obstructed the achievement of the projected objectives. With no doubt, popularizing and awareness of local populations, joint with a correct execution of these measures and a strong institutional support were decisive to succeed. This experience could result really useful to apply in the conservation of the Cabo Blanco monk seal colony and its habitat, which stills lacks of legal measures of protection, and where fishing activities represents an obvious risk.

The final assessment of the project, which has allowed to exchange information and experiences among the three teams is with no doubt very positive and it results advisable to keep in the future this work line.

Annex 4

ACTIVITY REPORT OF THE VISIT TO GREECE BY SPANISH EXPERT

By: **Mr. Manel Gazo, Research Biologist**
Universitat de Barcelona, Facultat de Biologia, Departament de Biologia
Animal

1. INTRODUCTION

From the 9th to the 20th of September 1999, I visited the Greek researchers from the Hellenic Society for the Study and Protection of the Monk Seal –MOM, in the framework of the project: “Establish a network between Mediterranean Monk Seal Projects” (Contract B4-3040/98/000648/MAR/D2).

My stay in Greece was split in two periods, one at MOM’s central office in Athens and the other in the field site of the Northern Sporades. During the visit I was informed on all the different aspects of the MOM project, way of work, the conditions of the field site, the different methodologies used for the monitoring of the seals and the establishment of a network for collecting information on monk seal sightings and strandings around all the Greek coastline.

2. SCHEDULE PROGRAM OF THE VISIT

9th of September

-Day of Arrival
-First meeting with Vrassidas Zavras, Spyros Kotomatas, Jeny Androukaki, and Stella Adamantopoulou

10th of September

-Meeting with Spiros Kotomatas. Explanation of the MOM’s organigram and infrastructure. The way the Hellenic society works and the hierarchy of Board of members and the operational group. Besides information on why and when MOM was founded and main goals of the Society.
-Departure to Agios Konstantinos and ferry to Alonissos.

Arrival at the field site and accommodation and first meeting with Panos Dendrinou and Elleni Tounta.

11th of September

- Visit to Steni Vala and IFAW-Odissea, MOm's research vessel.
- Travel to Skopelos and inspection of two caves used by some females in the precedent years.
- Visit to the MOm's Information Center in Patitiri and meeting with the volunteers who help in the center.

12th of September

- Visit to Palia Alonissos
 - Visit to the Center for marine studies at Geraka.
- P.Dendrinou explains the main objective of the Center as Information Point for National Marine Park of Alonissos -Northern Sporades and the fact that most of the installations of this new center will be used for the conservation of the monk seal. Visit to the facilities and the new rehabilitation area. Walk around Geraka bay and explanation of the optimal location of these area as a acclimatization site before release of the rehabilitated pups

13th of September

- Visit to some areas of Alonissos and preparation of the vessel for the departure of the following day.

14th of September

- Arrival of Jeny Androukaki (MOm) and Rosa Pires from the National Park of Madeira.
 - Departure from Steni Vala to Piperi, and visit to two breeding caves.
- Night on board at Planitis Bay at Kyra Panagia

15th of September

- Visit to Piperi, and walk around the island to view the cliffs and the open beaches and visit to the Panagia monestir.
- Visit to Cave Pip6 and first sighting of a Mediterranean monk seal female, presumably pregnant.
- Night on board at Agios Petros bay at Kyra Panagia.

16th of September

- Visit to two breeding caves around Kyra Panagia.

-Interview with the guardians who work with MOm as a surveillance. They showed me the type of information they gave to the Park visitors and also the system of communication that they have with the port police if they detect any vulneration of the Park specific restrictions.

-Departure to Alonissos where are two new inspection to two caves also used by seals and arriving another time to Skopelos to visit the two caves that were also visited in the 11th of September.

Return to Steni Vala and Patitiri.

17th of September

-Visit to the marine Center at Geraka, where there were two slideshows, one offered by myself about the situation of Monk seals in Cabo Blanco (Western Sahara) and another one presented by Rosa Pires about the situation and methods used by Portuguese experts working with the monk seal.

-Meeting with Jeny Androukaki and discussion on the topics concerning rehabilitation, acclimatization and release of pups in Greece. J. Androukaki also explains the protocols they use and the new direction in which they work is focused.

18th of September

-Departure to Athens, Trip day.

19th of September

-Day in Athens

20th of September

-Meeting with Stella Adamantopoulou, who explained how they build up and monitor the network of information on sightings of seals and also seals that are found at the coast dead or wounded.

-Slideshow at Mom's office in Athens on the status and reproductive outputs in the Colony of Cabo Blanco concerning the period funded by the Life Projects.

-Return to Barcelona.

3. OVERALL ASSESSMENT OF THE VISIT

The stay in Athens was useful for understanding the different goals of MOm, and its relevant role in the protection and conservation of the monk seal, by attempting to share the opinion of all the parts involved, conservationists, politics and fishermen. The time spend in Athens was also useful to understand the role as neuralgic center that MOm office plays joining all the different information sources. I also was introduced to the LIFE projects that are now being carried out, the main objectives of the project and the results obtained up to now.

The field stay was programmed at the National Marine Park of Alonissos, which is the first to be founded in Greece. It is situated in Eastern Central Greece, in the region of the North Sporades Islands. Although Alonissos is the largest island, the Park also encompasses six smaller islands (Peristera, Kyra Panagia, Gioura, Skantzoura, Piperi) and 22 uninhabited islands and rocky outcrops. I was accommodated at MOM's facilities at Patitiri and also onboard the MOM's vessel while patrolling the Islands of the National Park.

At the field site I was involved in the fieldwork joining the Greek experts on the visit and inspections of the caves used both as resting places and as breeding areas. Besides I also participated in the other main goal of the MOM's staff at the field site, making the public aware of the problem with the monk seals and the importance of maintaining its habitat protected and undisturbed, this message of sensitization is given to the tourist and visitors by means of the personnel of the information center at Patitiri and also to the travelers that cross the park boundaries on a boat, by the surveillance service of MOM guardians.

The main aim of this exchange project, the sharing of knowledge between the different teams studying the Monk seal and the observation in situ of the differences of the habitat used was in my opinion fully achieved.