Monk Seal Meeting Explorations of Monaco – Funchal September 6th 2017

Participants:

Moderator

 Paulo Oliveira, Instituto das Florestas e Conservação da Natureza (IFCN)

Experts

- o Panos Dendrinos, MOm
- Pablo Fernandez de Larrinoa, CBD Habitat Foundation
- o Luis Freitas, Museu da Baleia
- Philippe Gaubert, IRD
- Joan Gonzalvo, Tethys Research Center
- Harun Guçlusoy, Institute of Marine Sciences and Technology of Turkey
- Spyros Kotomatas, WWF
- Rosa Pires, Instituto das Florestas e Conservação da Natureza (IFCN)

Organisational team

- Bernard Fautrier, Prince Albert II of Monaco Foundation
- Philippe Mondielli, Prince Albert II of Monaco Foundation
- Auriane Pertuisot, Prince Albert II of Monaco Foundation

Other invitees

- Robert Calcagno, Oceanographic Institute
- o **Pierre Gilles,** Oceanographic Institute
- o Enric Sala, National Geographic
- Raquel Vasconcelos, University of Porto

The Prince Albert II of Monaco Foundation has had a long lasting engagement to monk seal conservation. After the organization of two expert meetings, it supported in 2011 a feasibility study whose results laid the basis for the Cyclades Life project in Greece.

The monk seals' situation is an emblematic opportunity to show that man can protect what he had once destroyed. The population increases are encouraging, even though there is still a lot to achieve to protect them and face new threats linked to the fact that populations are recovering (more interactions with humans).

This meeting in Funchal in the framework of the Explorations of Monaco was the opportunity to gather those who work on monk seal conservation, to give updates on the current situation and to start defining actions that could be implemented in the field to increase monk seal settlements in the Mediterranean and Atlantic.

In this sense, a follow-up event will be organized during the next Monaco Ocean Week (April 10th to 14th ,2018- expected date for the event April 12th), to bring together all the monk seal experts and present to foundations some commonly agreed strategic project that could facilitate concerted actions covering the whole range of the species' distribution to support their protection.

1. Current situations throughout the represented areas

Turkey (Harun Guçlusoy)

Little is known about monk seal distribution throughout Turkey as it has not be studied as much as in other countries. However, there is since 2011 a national conservation plan (PNUE-RAC/SPA).

Main threats that the Turkish monk seal population is facing:

- Habitat destruction
- Monk seal deaths (entanglements in fishing nets, deliberate killing); high fishing pressure on the Aegean coast.
- **Disturbance in caves** (cameras have been installed in some caves and the images show that more and more people are entering them)
- Decrease in fish stocks
- Marine pollution
- Marine traffic

Conservation needs:

- Habitat protection and prevention of cave disturbances and mitigation of seal-fishermen interaction
- Population monitoring (status and distribution)
- Information and rescue network

As seals have contact with humans, it is crucial that people are educated so that interactions do not become a problem (potential accidents, disturbance). It could also be envisaged to move the monk seal populations.

Madeira (Rosa Pires)

Population estimates have increased, from 8 individuals (1988) to about 40 today. However, new threats such as human interaction could mean that these estimates are actually higher than the real population. Since 2000, seals have returned to Madeira and the fear is that, as people want to get in contact, accidents happen which would negatively impact the perception of this animal and thus make it even more difficult to protect it.

IFCN works closely with the CBD-Habitat Foundation. They experimented, in 2012, autonomous photo systems in the caves in order to monitor them.

The SOS monk seal network also allows for stakeholders (maritime authorities, city councils, diving centers, touristic companies and local population) to report sightings and deal with emergency situations.

Main threats that the Madeiran monk seal population is facing:

- Disturbance (human-seal interactions with inhabitants and tourists)
- Interaction wish fishermen (IUU particularly), fish traps

Conservation needs:

Education is one of the main actions that needs to be implemented so that all stakeholders are involved and concerned.

Mauritania (Pablo Fernandez de Larrinoa)

Cabo Blanco has the largest monk seal population (about 300 individuals) located in the reserve "Côte des Phoques". 97 breeding females have been identified.

Collaboration with Madeira on the Atlantic action plan and monitoring has been very useful.

The massive mortality in 1997 also raises the question of the species' low genetic diversity as higher diversity would increase the species' resilience to other potential epidemies or related threats.

Main threats that the Cabo Blanco monk seal population is facing:

- Pressure from fisheries
- Habitat: the monk seals are already using the 3 best caves and there is no other place for them to go. The fact that many seals, especially females with pups, are very numerous in the same caves causes stress and fights.

Conservation needs:

- Means (funds) for the surveillance of the reserve
- Expansion of the seal populations to open beaches (to breed) and separating the populations to cover a larger area. The challenge is to get the seals to stay there as they prefer caves and beaches are unstable due to weather conditions.

Greece (Spyros Kotomatas – presentation of CYCLADES project)

In Gyaros (Wildlife Refuge), populations are going well with approximately 70 individuals and 8 to 10 pups per year.

The Cyclades Life project aims to create a model for MPAs using ecosystem-based and participatory management. This allowed to monitor and preserve not only the monk seals but also related species such as posidonia, octopus... which are part of their habitat and food source. A surveillance model is also being installed (radar, cameras, drones, patrols) and awareness-raising activities are organized for stakeholders.

Currently, Gyaros is waiting on the declaration as a MPA and legal frameworks are still to be determined. This is the main difficulty as administration is very slow. Monk seals do not stay only in the refuge and MPAs, and even though they are a good solution, it cannot be the only one.

Greece (Panos Dendrinos)

In Greece, monk seals are now encountered in areas that could not be "no take/no access" zones such as ports. Again, human interactions are more and more frequent.

Main threats that the Greek monk seal population is facing:

- Human interactions
- Slow administrative procedures

Conservation needs:

• Education of population

Ionian Sea, Greece (Joan Gonzalvo)

The situation is different in the Ionian sea, confronted to high pressures from the tourism industry.

Main threats that the Ionian monk seal population is facing:

 Human interaction: recreational boats and people interfering by visiting monk seal caves, fishermen

Conservation needs:

• Education: all stakeholders including charter companies and tourists

2. Open discussion

The situation of the species needs to be addressed at local and regional levels. Currently, action plans are created from different institutions (States which do not always have the technical or financial means to actually implement them, or "field actors" in each area). There is no actual structure to manage the whole population throughout its range.

Timescale is also an issue as it is linked to projects, which do not go over 5 years. To preserve the species, we need to look on the long term. This is even more important as we will soon have to adapt to climate change. It is crucial to take this into account now and include the anticipated effects in the reserves' management plans. (Prince Albert II of Monaco Foundation to contact IPCC and ask for study/models).

MPAs as solutions: Enric Sala encourages the creation of MPAs with no take/no access zone as a solution to the main threat which is human interactions, citing as a success story the Gokova reserve in Turkey. Participants acknowledge this but Panos Dendrinos (MOm) explains that even though it is a good solution, it is not the only one as monk seals do not respect their barriers and evolve much faster than administration. Furthermore, the Greek government has trouble sustaining existing MPAs. In any case, they seem more effective than Natura 2000 zones, weak in terms of regulation.

It has been discussed that it is necessary to involve other countries where monk seals are found. Some organizations like MOm are already collaborating with neighbor countries but this needs to be done more, especially as more sightings in these areas are reported.

Participants agree on the fact that long term planning and experience-sharing are necessary, alongside with strong communication to the different stakeholders.

Concerning the genetics of the species, a new project led by Philippe Gaubert and supported by the Prince Albert II of Monaco Foundation will start early 2018. It is mostly focused on the demographical history of the species, but genetics can help in conservation measures such as translocation.

Translocation could be envisaged as a solution but some participants state that, even though it has not been studied thoroughly and that little is known on how it could be done and possible impacts. Furthermore, if the main threats remain the same in all areas on the species' range, it may not be a viable solution in the short term. The WWF Greece is co-organising an event on MPAs (2019, in Greece) where there will be a workshop on translocation of marine mammals; this will be an opportunity to discuss it in further details.

Philippe Gaubert also explains that it is now possible to know if monk seals have been in caves from studying samples of sand.

Breeding in captivity is also a potential conservation measure under some circumstances for some of the participants but remains controversial issue and unsure in terms of feasibility and results.

It is also recalled that identification and monitoring campaigns still need to be carried out, using cameras or photo identification. This seems particularly crucial in Turkey as very little is known in terms of populations and breeding sites.

3. Conclusions

It is clear that despite respective actions plans and, in most cases, proven increase of number of monk seals, populations are still recovering and now facing new threats.

If we wish for populations to continue expanding, it is crucial that we overcome the issues of human interactions and habitat destruction. Education and awareness raising of all stakeholders is one of the solutions at a global/regional scale. It also seems necessary to define the kind of protected areas which could be efficient for monk seal conservation.

Main conclusions from the meeting

- 1. The group of experts should meet more often
- 2. It is important to raise public awareness to overcome the problem of interaction with people/economic activities
- 3. It is important to understand the conceptual design of MPA's to have an effective protection of monk seals
- 4. Increase genetic knowledge about the populations is important for a long term management of the species.
- 5. Good science and sound knowledge is important to address the impact of climate changes

All participants wish to keep the momentum launched by this meeting, to encourage experiencesharing between experts working on the species and to invite newcomers and other countries where monk seals are present to the next meeting.

The Prince Albert II of Monaco Foundation wishes to organize an event during the MOW 2018 with the objective to present to other foundations with interest in monk seal conservation

- the current situation of monk seal populations
- a concept note of a global conservation project

Next steps:

Action	Who
Suggestions on other actors to bring into the	All participants
monk seal expert group	
Sharing of ideas for priority actions to propose	All participants (based on guidelines sent by Prince Albert II of Monaco Foundation)
Mobilize foundations that wish to support this	Prince Albert II of Monaco Foundation
kind of project	
Organization of the MOW event, early April	Organization: Prince Albert II of Monaco
2018 in Monaco (proposal to organize it on	Foundation
April 12th)	Participation: all + new comers and other
	mobilized foundations