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Istanbul, Türkiye, 20-22 May 2025

Agenda Item 5: Conservation of Species and Habitats

5.3. Updating of the Regional strategy for the conservation of monk seal in the Mediterranean

Status of the implementation of the MED Monk seal Project

Note:

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Note by the Secretariat

1. The MED Monk Seal Project: Enhancing Knowledge and Awareness of the Monk Seal in the Mediterranean is funded by the Monk Seal Alliance and led by the Specially Protected Areas Regional Activity Centre (UNEP/MAP/SPA/RAC), with support provided by a Steering Committee that includes representatives from IUCN-Med and CBD-Habitat.
2. The main objective of the project is to support the implementation of capacity-building, monitoring, and public awareness programmes in Group B and C countries, in line with the Regional Strategy for the Conservation of the Monk Seal in the Mediterranean and the EcAp/IMAP guidelines.
3. This progress report, prepared by SPA/RAC, summarizes the main activities carried out from December 2021 to April 2025 and provides an overview of accomplishments made for each activity, as outlined in the project work plan, along with the objectives and initial results achieved within the framework of the project
4. This document is submitted to the 17th meeting of the SPA/BD Focal Points for Information.

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1. Introduction

1. The **MED Monk Seal Project: Enhancing Knowledge and Awareness of the Monk Seal in the Mediterranean** is funded by the Monk Seal Alliance and led by the Specially Protected Areas Regional Activity Centre (SPA/RAC), with support provided by a Steering Committee that includes representatives from IUCN-Med and CBD-Habitat.
2. The project aims to support the Contracting Parties to the Barcelona Convention in implementing the priority goals set out in the Regional Strategy for the Conservation of the Mediterranean Monk Seal.
3. The project activities are coordinated by SPA/RAC in close cooperation with the beneficiary Contracting Parties: Algeria, Egypt, Italy, Lebanon, Libya, Morocco, Syria, and Tunisia.
4. The project aims to achieve four principal outcomes:
 - ❖ Countries from Groups B and C (as defined by the Regional Strategy) have the capacity and necessary knowledge to launch national-scale monitoring programmes.
 - ❖ Links and networks between organizations are well established, and standardized data from the initiatives is being compiled.
 - ❖ Communication tools are developed and distributed to effectively reach various stakeholders.
 - ❖ Project data is hosted in a publicly accessible database.

The project, initially scheduled to end in December 2024, has been extended until December 2025, at no additional cost.

2. Description and schedule of achievements for the elapsed period

	Specific Goals	Activities to be implemented	Scheduled dates	Completion dates	Completed actions
SG1	Coordinate project activities with other actors working in the same areas and/or types of Actions	A1: Participation in 4 yearly “Coordination Committees” with participation in projects funded by the MSA under Call B.	January 2024 – December 2025	This action continues until the end of the project.	<p>Coordination meetings were organized with the MSA coordinator, consultation of the Project Steering committee was made by email and face to face with one Steering Committee member at the occasion of the WS in Mersin.</p> <p>An additional Steering committee online meeting is planned mid 2025, to discuss the project finalization as regards the possible 6-month no-cost extension, and its long-term continuation</p>
SG2	Internal organisation, structure and framework of the project is finalised	<p>A2: Conduct Online meetings with Steering Committee members (CBD-Habitat and IUCN) to draft and then adapt the ToR for the Steering Committee.</p> <p>A3: Online meetings with the identified partners in each country to discuss their activities in full details with regard to budget and timeline.</p> <p>A4: Contracts are drafted, agreed upon and signed by the partners.</p>	<p>A2: December 2021 - 08 June 2022.</p> <p>A3: December 2021 - 08 June 2022.</p> <p>A4: December</p>	<p>Covered during the preparatory phase,</p> <p>A3 and A4 finalised</p>	<p>achieved</p> <p>MoUs with the following partners were signed and are</p>

			2021 - 08 June 2022.		<p>under implementation and finalisation</p> <p>-The Arab Union for Sustainable Development and Environment (AUSDE), Egypt (Finished)</p> <p>-The Association de Gestion Intégrée de Ressources (AGIR) Morocco</p> <p>-APAL, Tunisia</p> <p>-The MoE in Libya</p> <p>Interim technical reports or updates were received from all partners and final technical/financial reports have been received from Egypt and Libya.</p> <p>For Algeria, it has not been possible to draft a MoU for implementing activities so far. A representative took part in the training in Mersin.</p> <p>Due to the situation in Syria, it was not possible to sign an MoU or have Syrian participants attend in-person training. However, contact has been maintained, and plans are underway to organize a practical in-person training session in Lebanon during summer 2025.</p>
SG3	Capacity building needs indicated in the Strategy and the Action Plan are	A5: With the assistance of IUCN (who are already working on standardising the regional protocol of monitoring), the steering committee of	<p>A5: September 2022 to November 2022</p> <p>A6: workshops</p>	Finalised in November 2024	Trainers have provided a protocol document to the participants which is derived from the IUCN protocol in September 2023. This Training manual was updated in

	addressed and then fulfilled	<p>the project will discuss and then adopt the standardised protocol that will be used in the training workshops of the SG2.</p> <p>A6: The standardised protocol will be applied in tow (or three) sub-regional workshops that will be held in Turkey and Greece to train participants from the countries of Groups B and C. the standardized protocol will be used by all the monitoring initiatives that will be supported by the project in order to have comparable/standard data at the end of the project.</p> <p>A7: The training organisations will continue to have an advisory role in which they will be linked to the group of countries/organisations from Group B and C that they trained and will provide support and troubleshooting during the implementation of the monitoring.</p>	<p>will be held between November 2023 and Mar 2023</p> <p>A7: Until May 2024.</p>	<p>October/November 2024 for the second workshop (Manual 2.0)</p> <p>The first sub-regional Training Workshop (online and in-person sessions) on Monitoring Mediterranean Monk Seals and their Habitats was conducted in September and October 2023 in collaboration with Archipelagos Italy and Greece including theoretical and practical sessions, a field visit, and group discussions for lessons learned, feedback, and recommendations for future actions. (See Annex 1 for all details)</p> <p>The Second sub-regional Training Workshop was conducted in November 2024 in Mersin, Türkiye y, in collaboration with METU and Archipelagos Italy, back-to-back with an IUCN Med Expert group meeting. These 3-day event included theoretical courses, Laboratory practical sessions, a field visit, and group discussions for lessons learned, feedback, Regional/transversal matters and recommendations for future actions. (See Annex 2 for all details)</p> <p>There has been a continuation of distance support from Archipelagos and ISPRA, in particular</p>
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					through the dedicated WhatsApp group created to facilitate regular exchanges and assistance.
SG4	Monk seal standardised monitoring initiatives are established in selected countries and data on the species is compiling	<p>A8: Equipments essential for each initiative are made available to the partner. This include the obtaining of permits, buying and shipping of the equipments and dealing with the customs</p> <p>A9 In each country, the monitoring programme is launched and become active in the field (for full list of activities in each country, please refer to paragraph 16)</p> <p>A10 Create a Support Group through a mailing list (or other suitable communication tool) to provide the necessary support for the partners especially at the early stages of launching the monitoring programme.</p>	<p>A8: January 2022- May 2023.</p> <p>A9: March 2023 - May 2024 (may vary between countries).</p> <p>A10: November 2022 - December 2025.</p>	<p>A8 finalised</p> <p>A9 and A10 This action continues until the end of the project and beyond</p>	<p>In June 2023, a technical consultation with partners from the six participating countries highlighted varying needs. Challenges in determining the precise number of required cameras, combined with shipping constraints, led to the decision to procure an initial stock of 25 camera traps= which were delivered to national partners during the Regional Workshop in Greece (25–30 September 2024).</p> <p>In August and September 2024, further consultations were conducted with partners to assess additional needs. Subsequently, SPA/RAC purchased 12 additional camera traps and delivered some during the second training Workshop.</p> <p>The Active Support group on WhatsApp provides a successful platform for exchanges.</p> <p>Updates on progress at the national level were shared during the Second Subregional</p>

					<p>Meeting in November 2024.</p> <p>Specific assistance from ISPRA to Tunisian partners was initiated at the workshop, building on ISPRA's 2001 study on La Galite Caves. Similarly, targeted support was provided to Lebanon by Archipelagos Italy.</p>
SG5	<p>Public awareness regarding monk seal presence, threats and conservation has increased.</p>	<p>A11 The Project will launch a call for proposals to ask for suitable public awareness activities on the local, national, sub-regional levels.</p> <p>A12 The Steering Committee will select a number activities based on priority and budget taking in consideration joining similar initiatives (e.g. those that target the fisheries communities). These activities will be launched and the SC members and all the partners will assist in promoting these activities.</p>	<p>A11: early November 2023 for the call</p> <p>A12: early December 2023 (for the selection of the call) - March 2024.</p>	<p>This action continues until the end of the project and beyond</p>	<p>Communication activities and associated budget are integrated into the MoU with each Partners.</p> <p>Partners have implemented targeted communication and awareness activities following the approval of their proposals and budgets by SPA/RAC. These activities include awareness meetings with fishers, communication with tourists, posters, and other methods to inform the public about the species. Details are included into Partners intermediary reports/updates and in the upcoming final technical reports</p> <p>In addition, the following communication news,</p>

					<p>posts, prepared by SPA/RAC has been shared through its Social media (FB, Twitter, link din) and web site</p> <p>‘https://www.rac-spa.org/node/2520) (see annex III:</p> <ul style="list-style-type: none">-the Workshop sessions-Local media news in Greece ;-A Video on the WS and the project-A series of comics ; A guide of Best practices when encountering a Monk seal have been finalised early 2025) in 3 languages, 2 formats (short and long) . <p>SPA/RAC participated in MSA/NECCA Side-Event on Mediterranean Monk Seal Conservation at Our Ocean Conference in Athens, on April 17th 2024.</p>
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3. Goals and initial results achieved

		Anticipated results	Indicators	Results
SG1	R1	Efficient and regular communication with other project leaders funded under Call B of the MSA	4 meeting minutes are shared between project leaders and the MSA (PAIIF as coordinator) per year	<p>Since the signature of the addendum in December 2022, SPA/RAC took part to the MSA Forum (Athens, January 2023) where many exchanges occurred with project leaders funded under Call B of the MSA.</p> <p>In addition, SPA/RAC is a member of the Working Group on the Med Monk Seal Data Sharing Platform and is kept informed of the progress.</p> <p>SPA/RAC took part to IUCN-Med group meeting in July and in November 2024</p> <p>SPA/RAC also participated in MSA/NECCA Side-Event on Mediterranean Monk Seal Conservation at Our Ocean Conference on April 17th 2024. insights gained from the project were shared during the panel on Inclusive and holistic conservation: lessons-learned and solutions.</p>
SG2		<p>R3 ToR for the Steering Committee of the project is drafted, evaluated and approved.</p> <p>R4 Partner organisations are confirmed and contracted in each country/region.</p> <p>R5 The role of each partner is confirmed and approved by the Steering Committee.</p>	<p>1st meeting of the Steering Committee is launched</p> <p>ToR for the Steering Committee is finalised and adopted.</p> <p>Contracts with the different partners (stating the detailed role of each) are signed by both parties.</p>	<p>Achieved</p> <p>This was completed under preparatory phase.</p> <p>MoU and contracts supporting the implementation of national activities were signed in Morocco, Tunisia, Egypt, Libya</p>

SG3	R6	A standardised protocol of fieldwork is found, discussed and adopted by the Steering Committee to be used in the dedicated training workshops.	The standardized monitoring protocol is finalized and adopted by the Steering Committee	<p>The standardised protocol has been developed by IUCN Med and discussed during two International experts meetings (Greece, 9 -11 July 2024; Turkey, 11-13 November 2024) and is presented as information document WG. 608/Inf.16</p> <p>The training manual, which includes the basic monitoring protocol, was finalised in September 2023 and updated in October 2024 (Manual 2.0)</p>
	R7	Experienced organisations from countries of group A passed their knowledge and experience to their equivalents in countries B and C.	The training workshops are conducted successfully with the attendance of the targeted candidates.	<p>The first subregional training workshop was conducted entirely in September and October 2023. (see Annex I for the technical report)</p> <p>The second subregional training workshop was implemented in Mersin, Türkiye in November 2024 for the participants who could not attend the practical session due to unexpected events or visa issues. see Annex II for the technical report)</p> <p><i>A third small practical workshop is under preparation for Syrian partners, and ready to be conducted in Lebanon as soon as the situation allows</i></p>
	R8	Countries from group B and C have the capacity and the necessary knowledge to launch monitoring programme(s) on the national level.		Participants from Syria still need to finish the workshop cycle by attending a practical session, that hopefully will be organised in Lebanon.
SG4	R9	Priority monitoring initiatives are presented by the partners and agreed upon by the Steering Committee first and then by SPA/RAC and	Regular progress reports and data samples to be submitted by the Partners working in the field.	Final technical report was provided by Egypt and Libya. It is still expected from Morocco, Tunisia by the end the summer 2025. Intermediary reports or updates were provided in the meantime.
	R10			

	R11	<p>the National Focal Point in each country.</p> <p>The Standardised monitoring programmes are launched and are active in the field. on-hand training at this stage will also enhance the experience of the Partners.</p> <p>Links and networking between the organisations is now well established and standardied data from the initiatives is compiling.</p>	<p>SPA/RAC Focal Points can also assist on evaluating and monitoring the progress of each project since they submit regular reports to SPA/RAC.</p> <p>Regular online meetings of the steering committee with the Partners and the Support Group to follow on the implementation of the initiatives.</p>	<p>Continuation of distance support and subregional exchange through the active dedicated WhatsApp group created to, facilitate regular exchanges and assistance.</p>
SG5	<p>R12</p> <p>R13</p>	<p>Public awareness and sensibilisation activities are identified on the national or sub-regional levels, launched and reached the targeted audience.</p> <p>Appropriate communication tools are created and distributed to reach the right audience and stakeholders on the local, national level.</p>	<p>A number of public awareness activities are selected by the Steering Committee.</p> <p>These activities are then launched and reached the desired audience successfully.</p>	<p>Several products (Poster, brochures....) and activities (Local awareness workshop) were implemented by Partners as part as their MoU.</p> <p>At the regional level, SPA/RAC has developed and implemented a communication strategy for the project. News were provided on SPA/RAC websites, FB and X. Cartoons have regularly posted in December 2024. A guide of good practices was prepared and is circulated in 2025 across the region. (see annex III)</p>
SG6	<p>R14</p> <p>R15</p>	<p>The Data from the projects is hosted in a publicly accessible database.</p> <p>Results and recommendations of</p>	<p>Data is hosted on the Biodiversity Platform and is communicated to the other partners</p>	<p>In alignment with the Med Monk Seal Data Sharing Platform initiative, project partners are expected to share their data with the MSA and, eventually, on the future platform, as stipulated in the signed MoUs.</p>

		the project are communicated to decision makers and relevant stakeholders.		<p>Data gathering on habitat is underway, with instructions on the expected data format provided to each partner. Their submissions are now anticipated.</p> <p>A workshop or seminar to present results may be organized by October 2025, pending budget availability.</p> <p>A no-cost extension of the project has been approved to enable national partners to continue collecting data and maximize the use of the already installed camera traps.</p>
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Annex I: Report of the First Regional Workshop on Mediterranean Monk Seal and Its Habitats Monitoring Methodologies

1. INTRODUCTION & CONTEXT

1. The Mediterranean Monk Seal (*Monachus monachus*) is one of the most endangered pinniped species and an Evolutionarily Distinct and Globally Endangered (EDGE) mammal (Isaac *et al.* 2007). Historically, commercial seal hunting and human persecution (Johnson and Lavigne 1998, Johnson 2004, González 2015) wiped out colonies living on open beaches and reduced Mediterranean Monk Seal populations to small numbers. This in turn led to a change in terrestrial habitat use and produced severe bottleneck(s) that significantly reduced genetic diversity. For most of the 20th century, numbers continued to decline, mostly as a consequence of human invasion into critical seal habitat, persecution and adverse fishing interactions. This resulted ultimately in the fragmentation of the species into several subpopulations and its disappearance from most of its historical range. At the species level, the Mediterranean Monk Seal was listed on the IUCN Red List as “Critically Endangered” at the Global scale in 2008 (Aguilar and Lowry 2008); a re-assessment in 2015 listed the species as “Endangered” (EN) (Karamanlidis and Dendrinis 2015). In 2019, the subpopulation in the eastern Mediterranean Sea was also listed as Endangered (Karamanlidis *et al.* 2019).

2. Mediterranean Monk Seals continue to be exposed to a number of substantial threats, including habitat loss and deterioration displacement, as well as persecution and negative interactions with fisheries (Karamanlidis *et al.* 2016a, Karamanlidis *et al.* 2020) and tourism (Pires *et al.* 2020). Unpredictable threats, such as disease, toxic algal blooms (red tides) (Martínez-Jauregui *et al.* 2012), cave collapses (González *et al.* 1997), pollution (e.g., oil spills, microplastic) and habitat change due to climate change also pose (potential) threats to the Mediterranean Monk Seal.

3. There is recent evidence of a significant increase in the range of the Monk Seal in Greece, which is one of the main reproductive areas of the European Mediterranean Monk Seal subpopulation (Adamantopoulou *et al.* 2022). In Türkiye a range expansion and an increase in sightings have also been documented (SAD-AFAG unpublished data September 2023). The number of mature individuals is now thought to be globally more than 250, but less than 1,000 individuals. Because the global population of the Monk Seal still remains small, it qualifies as Vulnerable (VU) under Red List Criterion D1.

4. Post the adoption of the updated Regional Strategy for Monk Seal Conservation in the Mediterranean by Barcelona Convention COP 21, SPA/RAC organized a focused workshop during WMMC19 for Group B & C countries (Algeria, Egypt, Israel, Italy, Lebanon, Libya, Morocco, Tunisia). Leveraging workshop outcomes and bilateral discussions with key stakeholders, including IUCN-MED and CBD-Habitat, SPA/RAC launched The MED Monk Seal Project: Enhancing knowledge and awareness on monk seal in the Mediterranean in December 2022, aiming to enhance knowledge and awareness of monk seals in the Mediterranean.

5. Funded by the Monk Seal Alliance, [the project](#) operates in South and Eastern Mediterranean Group B & C Countries (Algeria, Egypt, Italy, Libya, Morocco, Syria, Tunisia). Led by SPA/RAC and supported by a Steering Committee with members from IUCN-MED and CBD-Habitat, the project aims to strengthen capacity building, monitoring, and public awareness programs, aligning with the Regional Strategy and IMAP/Ecosystem Approach guidelines.

6. A key initiative within the project is a capacity-building program targeting Group B & C countries, where monk seal sightings are increasing. The non-profit organizations “Archipelagos - ambiente e sviluppo, Italia” (Archipelagos Italy) and “Archipelagos - environment and development” (Archipelagos Greece) were selected through a June 2023 tender process (Ref: Call for tenders N° 22/2023_SPA/RAC) to assist SPA/RAC for the organization and conduction a sub-regional Training Workshops on Monitoring Mediterranean Monk Seals and their Habitats.

7. Dr. Luigi Bundone and Mrs. Aliko Panou were designed as the primary expert trainers for the workshop. Dr. Bundone, designated as Expert 1, and Ms. Panou, designated as Expert 2, on behalf of, respectively, Archipelagos Italy and Archipelagos Greece, both bring a wealth of skills related to the Mediterranean monk seal, aligning perfectly with the call requirements:

1. Expertise in habitat availability and habitat use, spanning high-density areas (Greece) and low-density areas (Croatia, Montenegro, Albania, Italy, and Israel).
2. Development of a specific methodology for photo-identification through surveys and catalogs.
3. Extensive theoretical and practical experience with the species, along with a track record of planning and executing funded projects/programs.
4. Proficiency in communication and engagement with various stakeholders, coupled with experience in organizing and conducting workshops.
5. Familiarity with the proposed location for the field trip.

8. The workshop, comprised a blend of online and in-person sessions throughout September and October 2023, including theoretical and practical sessions, a field visit, and group discussions for lessons learned, feedback, and recommendations for future actions.

2. WORKSHOP APPROACH AND METHODOLOGIES

9. The training workshop was structured into three parts, in two formats:

- Two online sessions: Introduction course on the Mediterranean monk seal-MMS (general information on the species biology, ecology, distribution, threats, protection, monitoring and sampling techniques): September 18, 2023 & October 23, 2023
- One In-person session: practical activities to monitor the species and its habitats and training courses evaluation: held from 27-29 September 2023

10. The online training sessions were conducted using the freeware Zoom. The participants were designated to represent the project national partners to the online and in person sessions. (see Annex 5.2 Lists of participants)

11. All participants received an email invitation to participate to the Webinar and letters of invitation to the face-to-face workshops, as well as letters of support for visa related issues. Several tools were developed to support the workshop and were made available to the participants: a workshop workplan, Agenda(s), Logistical Note, PPT Presentations and a training Manual including a monitoring protocol. Participants who attended all sessions received certificates of attendance.

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3. TRAINING CONTENT

3.1. Session 1: Introduction course on the Mediterranean monk Seal

12. This first session was conducted online on September 18, 2023, from 11:00 to 15:00 (Greek Time), The session was officially recorded following the unanimous agreement of all attendees and was carried out as follow:

a) Opening Session by SPA/RAC and Archipelagos

13. Mrs. Lobna Ben Nakhla (SPA/RAC Programme officer) welcomed all participants and recalled that the training was organized within the framework of the "Med-Monk Seal Project: Enhancing Knowledge and Awareness on Monk Seal in the Mediterranean". The latter is funded by the Monk Seal Alliance, started in December 2021, and is expected to continue until May 2024, with the potential for an extension.

14. She informed the meeting that the online session aimed to provide a detailed introduction to the course, offering general information on monk seal species and conservation aspects and that an in-person training session was scheduled in Sami, Kefalonia. She underlined that Mrs. Julie Belmont, international consultant, contracted by SPA/RAC, has been actively engaging since June 2023 with national partners to refine project elements for national-level implementation.

15. Mr. Luigi Bundone, President of the Board of Directors of Archipelagos - ambiente e sviluppo, Italia, emphasized that the theoretical presentation aimed to serve as a crucial foundation for the practical sessions scheduled for the upcoming week.

16. Each participant then introduced themselves along with their current organizational position (see Annex 5.2).

b) Training course

17. The main highlights from the training courses are listed below:

- Comprehensive background on the Mediterranean Monk Seal (MMS), including its distribution, threats, and monitoring methodologies such as habitat survey, sighting records, and photo-identification.
- Emphasis on the significance of establishing a network of experts and a long-term monitoring program.
- In-depth exploration of methodologies, covering habitat survey and photo ID techniques.
- Engaging Questions and Answers (Q&A) session, promoting participant interaction.
- Thought-provoking discussion on reintroduction and captive breeding issues.

18. During the training, Dr. Bundone provided insights into the MMS distribution, threats, and monitoring methods. Mrs. Panou expanded on the biological and ecological aspects, including international legislative frameworks for species protection. This comprehensive session covered biology, ecology, threats, conservation status, protective agreements, and tools.

19. The subsequent online segment facilitated a dynamic Q&A session, allowing participants to delve deeper into the presented topics. The session concluded by redirecting attention to the preparatory aspects for the upcoming In-Person Workshop in Sami, including essential elements like the equipment checklist and camera handing over logistics.

20. The training concluded with an optimistic outlook for the successful implementation of the Med Monk Seal Project.

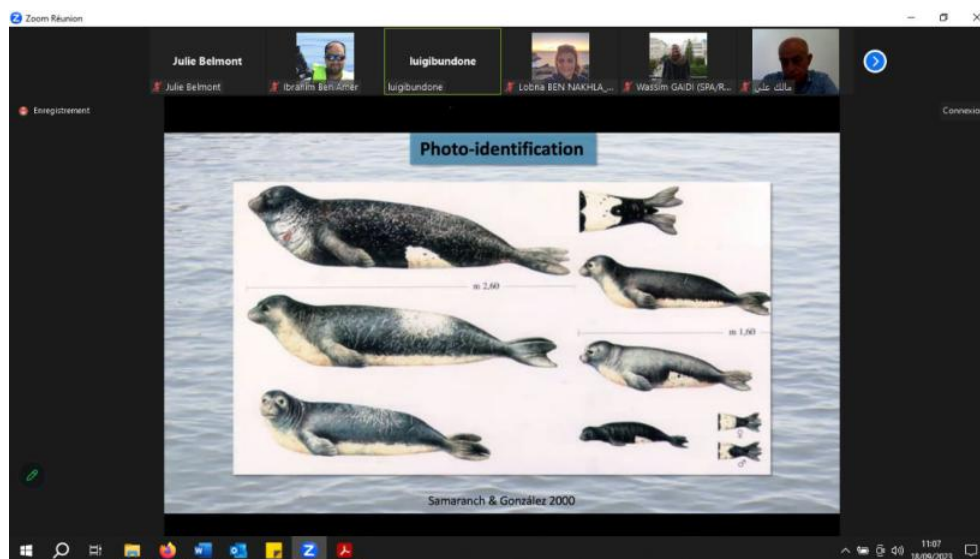


Figure 1 : Screenshot of Med Monk seal Identification slide - Med Monk Seal Regional Workshop, Online session 1, 18th of September 2023

3.2. Session 2-Practical training in Sami, Greece

21. This session was organized by SPA/RAC in collaboration with Archipelagos Greece and Archipelagos Italy from the 26 to the 30th of September 2023, on the Island of Kefalonia, Sami, Greece.

22. Participants were hosted at the hotel Staggia Studio, and in door session were held at a Meeting room kindly provided by the Municipality of Sami.

23. Several nominated participants were not able to participate due to specific issues¹. The workshop adhered to the initial agenda (see Annex. 5.1) with a modification specifically for fieldwork.

❖ 26th September 2023

24. The session was held at the hotel Staggia Studio, from 9 am to 5 pm. This day was coordinated by SPA/RAC representatives and involved rotating sessions designed to assist participants in preparing for the upcoming phase of implementing the Med Monk Seal project following the training. It focused mainly on the finalization of the MoU, the related financial and administrative aspects, activities, Partners Network set up and regional experts support (e.g. ISPRA), cameras testing and handing over. It happened as follows:

- Presentation of the Med Monk Seal Project, the Monk Seal Alliance context, followed by a roundtable discussion.
- Rotating group sessions covering the following topics:
- Finalization of the MoU and administrative aspects for the implementation of the Med Monk Seal Project at the national level.
- Camera traps checking
- Procedures for donating, discharging, and receiving trap cameras

¹ Participants from Algeria and Syria faced visa-related issues, preventing their attendance at the practical part of the Sami workshop. 2 Participants from Libya were also unable to attend due to unforeseen national circumstances, specifically the devastating flooding caused by the Mediterranean Storm Daniel in September 2023. A second training session is planned for spring 2024, likely in Tunisia, to address the training needs of these participants and avoid visa application challenges.

- Technical and scientific discussions with ISPRA colleagues regarding your national situation
- Daily Subsistence Allowance (DSA) deliver and reimbursements aspects.
- Guided excursion to the [Melissani Cave/Doline](#)
- Continuation of Rotating group sessions as needed.



Figure 2: Med Monk Seal Project Coordination and preparation session - Sami, Greece, September 26th, 2023.

❖ 27- 29th September 2023

25. The workshop began at 9am with an opening and welcoming talks from Dr. Bundone (Archipelagos Italy), Lobna Ben Nakhla (SPA/RAC), Julie Belmont (on behalf of Auriane Pertuisot, coordinator of the MSA), and Mikael Xanthakis, Vice Director of Zakynthos Park Management Unit of Kefalonia.

26. The training segment spanned two days, 27th - 28th September 2023, and comprised the following components:

3.3. Indoor Practical session

a) Recording and evaluation of sightings

27. A theoretical review of information preceded the introduction to practical activities. Methodologies for recording and evaluating monk seal sightings were discussed, focusing on the concept of sightings and biases related to data collection in the absence of photographic or video documentation. Participants engaged in a detailed analysis of both direct and indirect interview protocols.

b) Habitat survey

28. Theoretical review covered information on habitat surveys and preliminary investigations. Examples of cave mapping and various camera trap models were presented, emphasizing the model suggested for the workshop. Participants worked together to practice setting up camera traps and ensuring their anchorage, functionality and safety. Subsequently, a review of images and videos from the testing phase took place, allowing adjustments. Cameras (provided by the project) were installed in the hotel garden to test various settings. The following afternoon, participants examined images and videos from the test phase and made any necessary adjustments.

c) Photo-identification

29. The theoretical review revisited the methodology for photo-identifying monk seals, previously presented in webinars and included in the manual. Participants played identification games and learned how to order and organize collected data (spreadsheets and folders). Participants were introduced into the Archipelagos seal identification process and were shown how to build and organize a monk seal photo-identification catalogue.

d) Preparation of the field training survey

30. All the equipment and material necessary to carry out the field training survey were reviewed together with the participants.

e) Roundtable and discussion

31. The workshop included bilateral consultations and a short roundtable in the hotel meeting room. This session brought together all participants to exchange views, share experiences, seek advice, pose questions, and plan for future endeavors.



Figure 3 : Practical exercise on Monk Seals Identification, Med monk Seal regional Workshop, Sami, Greece, 28th of September 2023

3.4. FIELD SURVEY SESSION

32. Due to prevailing weather conditions, the field survey was ultimately conducted on the last day (Friday, September 29th). All participants were transported by ferry from Sami Port to Ithaca. Subsequently, they were driven by bus to the bay of Afales on the northern coast of Ithaca, where they boarded three speedboats, each accommodating a maximum of 7 people. The northern coast of Ithaca was surveyed from the sea to identify potential caves during approximately 4 hours. Participants were also encouraged to engage in snorkeling to observe and explore the underwater environment. In some of the identified caves, participants were encouraged to enter, practicing and evaluating the caves' suitability while conducting measurements. Additionally, a demonstration on camera trap installation by drilling was provided.

33. Later that day, upon returning to the hotel, participants had the opportunity to review and verify the images captured by the camera traps installed the previous day in the hotel courtyard for testing purposes. This provided a chance to test various modes offered by the camera trap model, ensuring a thorough understanding and allowing for necessary corrections.



Figure 4 : Field session photos in Northwestern Ithaca, Kefalonia, Greece on September 29, 2023. (from left to right) Group picture before embarking, Cave exploring from the boats, and Snorkeling cave exploration.

3.5. Session 3: Sampling methodologies and analysis

34. The second online session was held on October 23rd 2023 from 10:00 to 14:00 (CET). The course was led by Dr. Gema Hernandez-Milian, along with the support and participation of Dr. Bundone and Ms. Panou. Mrs. Ben Nakhla (Programme Officer - Species Conservation - SPA/RAC) opened the session, reminding that it was the last session of the workshop and briefly presented the objectives and schedule.

35. The purpose of this last session was to introduce sampling methodologies (e.g., hairs, faeces) and provide practical information on how to collect the samples and proceed to their analysis.

36. The session was attended by 16 participants (see Annex.5.2) and was officially recorded following the unanimous agreement of all attendees. It was carried out as follows:

- 1- How to prepare and collect the samples in the field
- 2- How to do the analysis, what to do with available resources

37. A series of questions/answers and discussions were held pursuantly to the course, before the last part of the online workshop which was dedicated to a review of the questionnaire feedback, a roundtable of consultation and on establishing the follow up process for the continuation of activities at national level. It was agreed that, in addition to regular bilateral updates with SPA/RAC, a dedicated online session will be organised early 2024 so to allow each participant to present their progresses in implementing the Habitat survey and camera installation, shared their difficulties and look for support.

38. The WhatsApp group set up during the Sami Workshop would remain active with the aim to allow exchanges of information, ask for advice and distance support to the group and the experts Luigi Bundone, Sabrina Airoidi and Giulia Mo. Additional participants to the group will be added upon request and consultation.

4. FEEDBACK & NEXT STEPS

39. Consultations with participants were consistently held throughout the workshop session, both through bilateral interactions and during group discussions. In addition, a questionnaire was meticulously prepared by SPA/RAC and the trainers to assess the workshop's effectiveness as perceived by the participants and how they feel about their ability to implement the next actions planned at national level. The questionnaire comprised 21 structured questions organized into three sections: impressions on the workshop, upcoming national activities, and workshop logistics.

40. The first section, focusing on the workshop's impression, received a highly positive response from participants, indicating a strong reception of information and a high level of experience provided. However, there was a minor point of contention, as 26.7% of participants expressed that the workshop's duration was too short. Some participants also raised minor concerns about the adequacy of the training load and their involvement. It's noteworthy that challenges in fully joining and participating both online and in person might have influenced some responses, particularly in terms of participants' involvement in practical exercises.

41. Similarly, respondents answered positively to questions about future workshop implementation and replication. In alignment with some of the live discussions among the attending parties, the necessity of expanding certain introduced aspects was emphasized, such as cave surveys, camera traps use, and photo identification. The majority of participants expressed readiness to initiate the project at the national level, with a recognition of the need for support and assistance. It was acknowledged that training for habitat survey and monitoring (mapping of marine caves and installation of IR camera traps) and photo identification would likely require additional days of involvement and practical field activities, considerations crucial for longer-term replications. Overall, participants found the logistics to be appropriate.



Figure 5 : Med Monk Seal regional Workshop participants, Sami, Greece, 28th of September 2023.

5. ANNEXES

Annex. 5.1 Initial Agenda

Timetable

Time*	Activity
16 September 2023: Training course online - Introduction	
11:00-12:00	MMS Distribution and threats
12:00-13:00	MMS monitoring methodologies
13:00-13:15	Break
13:15-14:15	MMS biology and ecology
14:15-15:15	MMS international legal framework for the protection of the MMS
15:15-16:00	Q&A
26 September 2023: Arrivals	
07:00-20:00	Check-in at the hotel
27 September 2023: Training course in-person - Practical examples	
09:00-10:30	Sightings: recording of the information and validation of the data
10:30-12:00	Habitat survey: preparation of the survey and collection of data
12:00-13:30	Camera traps: models and functions
13:30-14:30	Break
14:30-16:00	Photo-identification and organization of the data
16:00-17:00	Q&A
28 September 2023: Training course in-person Field Trip	
08:00-15:00	Field survey (including a break)
29 September: Training course in-person - Feedback and evaluation	
09:00-14:00	Round table discussion
30 September 2023: Departures	
07:00-12:00	Check-out
20 October 2023: Training course online - Sampling	
11:00-12:30	Sampling methodologies
12:30-12:45	Break
12:45-14:15	Collection and analysis
14:15-15:00	Q&A

*Time is expressed in GT

Annex 5.2:**Table 1 :** List of Participants of the Online Session 1 held on September 18th, 2023

Name	Country	Position/organisation
Lobna Bennakhla	Tunisia	Programme Officer - Species Conservation - SPA/RAC
Julie Belmont	France	International consultant, SPA/RAC
Wassim Gaidi	Tunisia	Consultant Assistant IMAP/MPA Project & Species Conservation Programme - SPA/RAC
Dr Malek Ali	Syria	Researcher, Tishreen University.
Ahmed ben Hmida	Tunisia	Senior Engineer - Head of Unit Ministry of the Environment - Coastal Protection and Development Agency (APAL)
Mohamed Besar	Egypt	Marine biologist EEAA
Ghiwa Fakry	Lebanon	Data collection involved already-
Giulia Mo	Italy	Researcher - ISPRA (Italian National Institute for Environmental Protection and Research)
Sabrina Agnesi	Italy	Researcher - ISPRA (Italian National Institute for Environmental Protection and Research)
Ibrahim Benamer	Libya	Projects Manager - Omar Mukhtar University
Mohamed Said	Egypt	Environmental Researcher - Nature Conservation Sector (NCS) – Egyptian Environmental Affairs Agency (EEAA) - Ministry of State of Environment.
Majd Habib	Lebanon	Palm Island Natural Reserve (PINR) committee member
Samer Fatfat	Lebanon	Palm Island Natural Reserve (PINR) committee member
Razika Mebarki	Algeria	Senior Engineer at the Commissariat National du Littoral (CNL) (Ministry of the Environment and Renewable Energy)
Yasmine Fasi	Algeria	Ministry of environment
Luay Elsayed Ahmed	Egypt	Coordinator of wildlife program & Director of biosafety department – Nature Conservation Sector - Egyptian Environmental Affairs Agency (EEAA) - Cabinet of Ministers
Dr. Amir Ibrahim	Syria	Tishreen Univeristy
Houssine NIBANI	Morocco	President - Integrated Resource Management Association
Souad Boustila	Algérie	Environmental engineer - Ministry of the Environment.
Karim Souhail	Morocco	Director - Al Hoceima National Park
Luigi Bundone	Italy	President of the Board of Directors of Archipelagos - ambiente e sviluppoo, Italia
Aliko Panou	Greece	President of the Board of Directors of Archipelagos - environment and development – Lourdata, Kefalonia

Table 2: Participants of the in-person Sessions held on September 26-29, 2023

Name	Country	Position/organisation
Lobna Bennakhla	Tunisia	Programme Officer - Species Conservation - SPA/RAC
Julie Belmont	France	International consultant, SPA/RAC
Wassim Gaidi	Tunisia	Consultant Assistant IMAP/MPA Project & Species Conservation Programme - SPA/RAC
Naziha Ben Moussa	Tunisia	Administrative assistant SPA/RAC.
Ahmed Ben Hmida	Tunisia	Senior Engineer - Head of Unit Ministry of the Environment - Coastal Protection and Development Agency (APAL)
Walid Belgacem	Tunisia	Administrative and technical assistant at Mediterranean Action Nature (MAN)
Walid El Abassi	Tunisia	Manager - Ministry of the Environment - Coastal Protection and Development Agency (APAL)
Mohamed Said	Egypt	Environmental Researcher - Nature Conservation Sector (NCS) – Egyptian Environmental Affairs Agency (EEAA) - Ministry of State of Environment.
Luay Elsayed Ahmed	Egypt	Coordinator of wildlife program & Director of biosafety department – Nature Conservation Sector - Egyptian Environmental Affairs Agency (EEAA) - Cabinet of Ministers
Samantha Fares	Lebanon	Member of wildlife conservation team - Friends of Nature NGO
Giulia Mo	Italy	Researcher - ISPRA (Italian National Institute for Environmental Protection and Research)
Sabrina Agnesi	Italy	Researcher - ISPRA (Italian National Institute for Environmental Protection and Research)
Ibrahim Benamer	Libya	Projects Manager - Omar Mukhtar University
Majd Habib	Lebanon	Palm Island Natural Reserve (PINR) committee member
Samer Fatfat	Lebanon	Palm Island Natural Reserve (PINR) committee member
Souhail Karim	Morocco	Director - Al Hoceima National Park
Houssine NIBANI	Morocco	President - Integrated Resource Management Association
Mickael Xanthakis	Greece	Vice Director of Zakynthos Park Management Unit , NECCA
Kostas Kokteras	Greece	NECCA
Franziska Stecher	Greece	NECCA
Luigi Bundone	Italy	President of the Board of Directors of Archipelagos - ambiente e sviluppo, Italia
Aliko Panou	Greece	President of the Board of Directors of Archipelagos - environment and development – Lourdata, Kefalonia
Yerassimos Antzoulatos	Greece	Member Archipelagos Greece

Table 3 : Participants of the Online Session 2 held on October 23rd, 2023

Name	Country	Position/organisation
Lobna Bennakhla	Tunisia	Programme Officer - Species Conservation - SPA/RAC
Julie Belmont	France	SPA/RAC International Consultant
Wassim Gaidi	Tunisia	Consultant Assistant IMAP/MPA Project & Species Conservation Programme - SPA/RAC
Luigi Bundone	Italy	President of the Board of Directors of Archipelagos - ambiente e svilupppo, Italia
Aliko Panou	Greece	President of the Board of Directors of Archipelagos - environment and development – Lourdata, Kefalonia
Gemma Hernandez-Milian	Ireland	Trainer, Monk seal Expert, IEO
Dr Malek Ali	Syria	Tishreen University.
Samantha Fares	Lebanon	Member of wildlife conservation team - Friends of Nature NGO
Ibtissem Ait Hamouda	Algeria	Ministry of Environment
Samer Fatfat	Lebanon	Palm island Natural Reserve – expert in fishing techniques and advocacy on marine protection
Amid Ibrahim	Syria	Researcher
Majd Habib	Lebanon	Palm Island Natural Reserve (PINR) committee member
Almokhtar Saied	Libya	Ministry of Environment
Laalia Nawel Madani	Algeria	Chef de département - CNDRB
Mohamed Said	Egypt	Environmental Researcher - Nature Conservation Sector (NCS) – Egyptian Environmental Affairs Agency (EEAA) - Ministry of State of Environment
Luay Alsayed Ahmed	Egypt	Coordinator of wildlife program & Director of biosafety department – Nature Conservation Sector - Egyptian Environmental Affairs Agency (EEAA) - Cabinet of Ministers.
Myrna Seeman	Lebanon	Researcher and Academic, Naturalist and Conservationist, IUCN-SSC Member

Annex II: Report on the Second Sub-regional Workshop on Monitoring Methodologies for the Mediterranean Monk Seal and Its Habitat

1. Introduction

1. The Mediterranean Monk Seal (*Monachus monachus*) is one of the most endangered pinniped species and an Evolutionarily Distinct and Globally Endangered (EDGE) mammal (Isaac et al. 2007). Historically, commercial seal hunting and human persecution (Johnson and Lavigne 1998, Johnson 2004, González 2015) wiped out colonies living on open beaches and reduced Mediterranean Monk Seal populations to small numbers. This in turn led to a change in terrestrial habitat use and produced severe bottleneck(s) that significantly reduced genetic diversity. For most of the 20th century, numbers continued to decline, mostly as a consequence of human invasion into critical seal habitat, persecution and adverse fishing interactions. This resulted ultimately in the fragmentation of the species into several subpopulations and its disappearance from most of its historical range. At the species level, the Mediterranean Monk Seal was listed on the IUCN Red List as “Critically Endangered” at the Global scale in 2008 (Aguilar and Lowry 2008); a re-assessment in 2015 listed the species as “Endangered” (EN) (Karamanlidis and Dendrinos 2015). In 2019, the subpopulation in the eastern Mediterranean Sea was also listed as Endangered (Karamanlidis et al. 2019).

2. Mediterranean Monk Seals continue to be exposed to several substantial threats, including habitat loss and deterioration displacement, as well as persecution and negative interactions with fisheries (Karamanlidis et al. 2016a, Karamanlidis et al. 2020) and tourism (Pires et al. 2020). Unpredictable threats, such as disease, toxic algal blooms (red tides) (Martínez-Jauregui et al. 2012), cave collapses (González et al. 1997), pollution (e.g., oil spills, microplastic) (Hernandez-Milian et al. 2023) and habitat change due to climate change also pose (potential) threats to the Mediterranean Monk Seal.

3. There is recent evidence of a significant increase in the range of the Monk Seal in Greece, which is one of the main reproductive areas of the European Mediterranean Monk Seal subpopulation (Adamantopoulou et al. 2022, Panou et al. 2022). In Türkiye a range expansion and an increase in sightings have also been documented (SAD-AFAG unpublished data September 2023). The number of mature individuals is now thought to be globally more than 250, but less than 1,000 individuals. Because the global population of the Monk Seal remains small, it qualifies as Vulnerable (VU) under Red List Criterion D1 (Karamanlidis, A.A. 2024).

4. Post the adoption of the updated Regional Strategy for Monk Seal Conservation in the Mediterranean by Barcelona Convention COP 21, SPA/RAC organized a focused workshop during WMMC19 for Group B & C countries (Algeria, Egypt, Israel, Italy, Lebanon, Libya, Morocco, Tunisia).

5. Funded by the Monk Seal Alliance, the project operates in South and Eastern Mediterranean Group B & C Countries (Algeria, Egypt, Italy, Libya, Morocco, Syria, and Tunisia). Led by SPA/RAC and supported by a Steering Committee with members from IUCN-MED and CBD-Habitat, the project aims to strengthen capacity building, monitoring, and public awareness programs, aligning with the Regional Strategy and IMAP/Ecosystem Approach guidelines.

6. A key initiative within the project is a capacity-building program aimed at Group B and C countries, where monk seal sightings seem to be increasing. Following a first sub-regional training workshop on Mediterranean monk seal and its habitats monitoring methodologies held in September and October 2023, a second similar workshop was organized to train national teams who were unable to attend the first session and to further enhance knowledge transfer, including the development of Version 2.0 of the training manual

7. This workshop emerged as a collaborative effort between SPA/RAC and two expert organizations on the species: Archipelagos - Ambiente e Sviluppo, Italia, as a follow-up to the initial training, and the Middle East Technical University - Institute of Marine Sciences (METU-IMS). Dr. Luigi Bundone, Dr. Gemma Hernandez, and Dr. Meltem OK were designated as the primary expert trainers for the workshop

8. The workshop took place at the Middle East Technical University-Institute of Marine Sciences (METU- IMS) facilities in Mersin, Türkiye, and was held back-to-back with the IUCN-Med Monk Seal Expert Group meeting during its last day. It featured a mix of theoretical and practical laboratory sessions, a field visit, and joint expert group discussions on regional transversal matters. Participants also provided feedback and suggestions for future actions and national monitoring efforts sustainability.

2. WORKSHOP APPROACH AND METHODOLOGIES

9. The training workshop took place from 11 to 13 November 2024 in Mersin, Republic of Türkiye. The participants were either designated by their respective national authorities or invited by SPA/RAC as official coordinators and team members of their ongoing national projects (see Annex 5.2 Lists of participants). The workshop was hosted at the METU-IMS facilities, with participants accommodated at the nearby Hotel La Pigna Hotel & Spa.

10. To facilitate participation, all attendees received formal invitation letters for the workshop, along with letters of support for visa-related processes. One nominated participant was unable to attend due to specific circumstances. For those who had not previously attended the 2023 online courses, additional preparatory materials were provided to help them familiarize themselves with the species and its conservation efforts ahead of the workshop. These materials included links to the regional strategy, videos, the 2023 Workshop Manual, and several relevant presentations.

11. Several tools were developed and provided to support the workshop, including a workshop work plan, agenda(s), logistical notes, PowerPoint presentations, and an updated Training Manual (Version 2.0), which incorporated a detailed monitoring protocol. The workshop adhered to the planned agenda (see Annex. 5.1: workshop Agenda) and participants received certificates of attendance after the event.

3. TRAINING CONTENT

a) Theoretical and indoor practical sessions

12. This first session was conducted on November 11, from 09:00 to 17:30 (Turkish Time) The session was carried out as follows:

[Opening Session by SPA/RAC and METU](#)

13. Dr. Barış Salihoğlu, Director of METU-IMS, officially opened the workshop with a presentation on the history, facilities, and research carried out by the Institute at both national and international levels. He welcomed participants and provided insights into METU's marine work, emphasizing the institute's increasing focus on socio-economic sustainability within its research fields.

14. Mrs. Lobna Ben Nakhla, Programme Officer at SPA/RAC, warmly welcomed all participants and highlighted that the training workshop was organized as part of the “Med-Monk Seal Project: Enhancing Knowledge and Awareness on Monk Seal in the Mediterranean”. She explained that the project, funded by the Monk Seal Alliance, began in December 2021 and had been extended to continue until December 2024. She expressed her gratitude to Dr. Meltem OK and METU-IMS for hosting the event, to the Ministry of Environment represented by the National SPA/BD Focal Point, and to the experts, including Dr. Luigi Bundone from Archipelagos (Italy) and Dr. Gemma Hernandez for joining in person. She also thanked ISPRA for their valuable support and knowledge exchange and acknowledged the efforts of the SPA/RAC team.

15. Mrs. Ben Nakhla further elaborated on the regional environmental policy context, including references to the IMAP (Integrated Monitoring and Assessment Programme), the Action Plan for the Conservation of the Monk Seal in the Mediterranean, and the Regional Strategy for the Conservation of Monk Seals in the Mediterranean.

16. She provided an update on the progress achieved by national partners in Morocco, Egypt, Libya, Lebanon, and Tunisia, acknowledging the significant efforts made thus far. Additional specific details on activities conducted at the national level were presented later by Mr. Almokhar Said for Libya and Mr. Samer Fatfat for Lebanon.

Training courses

17. The main highlights from this morning's training sessions are outlined below, with supporting materials available upon request to SPA/RAC. The workshop began with Dr. Meltem Ok (METU-IMS) delivering an introduction to the biology and ecology of the Mediterranean monk seal. This session provided general information on the species' protection and conservation, an overview of its status, monitoring, and distribution along the Turkish coast, as well as threats and biological and ecological aspects. International legislative frameworks for species protection and the broader conservation context were also discussed.



18. Dr. Luigi Bundone (Archipelagos - ambiente e sviluppo, Italia; Ca' Foscari University of Venice) followed with a presentation on Mediterranean monk seal sighting records and their analysis. Key concepts, definitions, and methodologies for recording and evaluating sightings were explained, along with direct and indirect interview protocols. Dr. Giulia Mo contributed by sharing ISPRA's experience with interviews and questionnaires of local communities (MPAs Managers, fishers.....) providing advice on effective data collection and storage.

19. Dr. Ok continued with a presentation on habitat surveys, field activity preparation, and camera trap setup. This session included practical advice on handling and maintaining cameras to ensure durability, particularly against challenges posed by sea and salt exposure. Next, Dr. Bundone led a session on photo identification, focusing on recognizing gender and age categories (adult, subadult, juvenile, pup). Participants engaged in a practical exercise to apply this knowledge.

20. The day concluded with a presentation by Dr. Gema Hernandez-Milian (Archipelagos - ambiente e sviluppo, Italia; Centro Oceanografico de Vigo, Instituto Español de Oceanografía-Consejo Superior de Investigaciones Científicas/COV, IEO-CSIC; Ca' Foscari University of Venice). She presented methods for sample collection and diet analysis (prey identification) using scat samples.

b) Field Trip to Tasucu and Akkum Caves (12/11/2024)

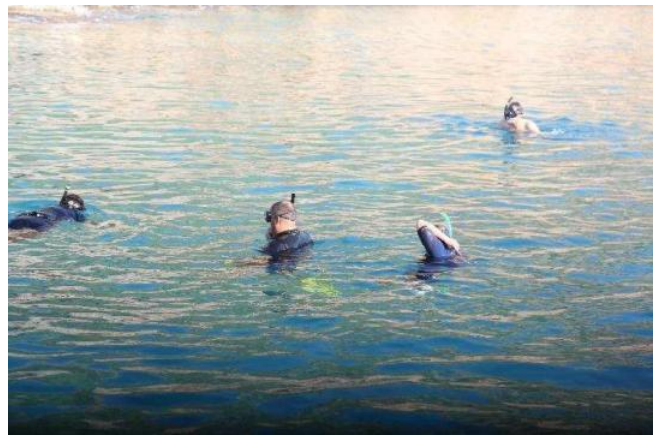
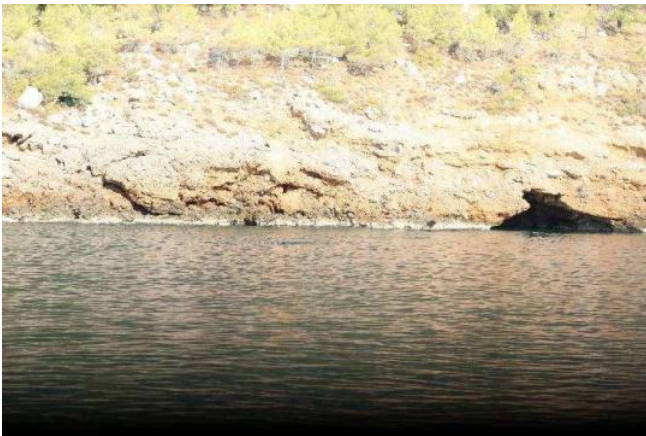
21. The second day of the workshop featured a field trip to Taşucu and Akkum, allowing participants to visit two caves known to be used by the Mediterranean monk seal. This trip aimed to provide insights into the species' habitat and demonstrate the installation of camera traps for monitoring.



❖ Visit to the Taşucu Cave

22. The group traveled by boat to the first cave, approximately an hour-long trip. Upon arrival, Dr. OK conducted a safety and disturbance check by entering the cave first to ensure no seals were resting inside. Once confirmed, several participants had the opportunity to enter the water and swim into the cave, guided by Dr. OK.

23. During the visit, Dr. OK and her colleagues provided detailed explanations about the monk seal's presence in the region, conservation regulations, and challenges. These discussions were enriched with concrete examples based on local conservation efforts and experiences.



❖ Visit to Akkum Cave

24. After lunch, participants reached the second cave in the Akkum area on foot. This cave is recognized as an one of the important habitats for monk seals, regularly hosting at least eight individuals. To minimize disturbances to the seals, two of the cave entrances (entrances from the land) were sealed off by METU in 2005 (with the permission from the related Ministry at that time) to prevent human access which had been known and documented in the past. Dr. OK explained this measure to the participants, highlighting the careful considerations and planning involved in the decision-making process. Due to the cave geomorphology, the seals have always accessed the cave exclusively through an underwater entrance.



25. Although no seals were observed in the cave during the visit, the large number of participants led to a collective decision not to enter the cave, ensuring minimal disruption to the habitat. Dr. OK demonstrated the proper method for installing a camera trap on the external rocky area of the cave.



c) Laboratory session, open discussion on sustainability and transversal regional topics

26. This last session was conducted on November 13, from 08:30 to 17:30 (Turkish Time) - The final day of the workshop was structured to overlap with the International Union for Conservation of Nature (IUCN) Mediterranean Monk Seal Working Group Workshop. The morning session was divided into activities tailored to both SPA/RAC participants and the broader group, to foster collaboration and address regional, transversal issues.

[Practical Laboratory Analysis](#)

27. The SPA/RAC group participated in a practical session led by Dr. Hernandez-Milian, focused on analyzing Mediterranean monk seals and other pinniped scat samples. This session introduced participants to methods for preparing and analyzing scat samples to study dietary habits. It was divided into two parts:

- ❖ **Sample Preparation: Techniques for preparing scat samples for prey identification.**
- ❖ **Prey Identification: Methods to identify prey remain within the samples prepared.**



Open group discussion

28. The morning session also included an open discussion among SPA/RAC participants to review the status of activities in each participating country and outline steps for the future development and sustainability of national monitoring efforts and data collection. Below is a list of the main outcomes from this exchange:

❖ Ensuring Continuation and Sustainability of Efforts at the National Level

29. The Libyan team is focused on exploring promising new areas, such as Tobruk, where limited human activity makes it suitable for monk seal conservation. Despite resource challenges, the team is committed to continuing its efforts with Environment Ministry support and potential assistance from international experts. It is noted that conservation progress is being made as the army begins monitoring illegal fishing practices like dynamite use. Continued engagement with fishers and awareness campaigns are key priorities.

30. In Lebanon, Habitat Monitoring currently covers 13 caves, with plans to expand. Efforts are underway to engage a broader stakeholder network, including diving clubs, tuna fishers, and kayakers. Community involvement is a focus, targeting schools and students to raise awareness. Research on monk seals potentially preying on *Lagocephalus* species is progressing, supported by the IndyAct project and links will be ensured with SPA/RAC. The installation of monitoring cameras in key areas is ready to be done, but it is necessary for the war situation to improve to install them safely.

31. At the time of the workshop, the situation in northern Lebanon and Syria was deemed safe enough by the Lebanese participants to consider implementing a three-day monk seal conservation training for Syrian participants. This initiative is to be further pursued at the SPA/RAC level, with the aim of organizing the event in 2025, if conditions allow.

32. Engagement with Algeria's National Focal Point (NFP) is ongoing, with discussions to revisit and update the Memorandum of Understanding (MoU). It is suggested that existing data from the 2019 Barcelona workshop on monk seal habitats, including cave coordinates, will be revisited and integrated into the monitoring efforts. Relevant information was shared on this matter with the participant from Algeria.

33. Italy's contributions focused on the historical presence of monk seals and long-term monitoring in place. Dr. Mo insisted on the importance of protecting existing equipment to ensure functioning durability. She emphasized the importance of building preparedness to respond to a potential return of the species and strengthening operational capacity for this. She encouraged the sharing of experiences, technical expertise, and resources among the region's conservation teams.

❖ Subregional Group Exchange and Support Continuation

34. Participants highlighted the value of ongoing capacity building, networking, and regional expert assistance and guidance. They emphasized the importance of strengthening collaboration and data sharing in preparation for future challenges. Suggestions for advancing these efforts included organizing an online seminar and utilizing the next MSA Forum to further strengthen connections and collaboration. The group also proposed developing a small regional project to secure additional funding sources, ensuring the continuation and expansion of current efforts. A small seminar next year was also recommended to maintain the momentum of knowledge exchange.

35. Additionally, it was indicated that plans are underway to establish a subregional network between Turkey, Syria, and Lebanon to enhance collaboration, with support from national and sub-regional partners like SADAFAG. Mrs. Pertuisot reminded that the Monk Seal Alliance (MSA) remains committed to supporting efforts related to knowledge exchange, data sharing, and the collective mobilization of resources.

36. In light of its success and the value it provides, the commitment to maintaining the online group of the MEDMonk seal project partners to support knowledge sharing and cooperation was reaffirmed.

❖ Data Storage and Mapping

37. SPA/RAC indicated that partners will soon be contacted to provide the data collected on monk seal habitats, particularly cave identification, in view of initiating a regional mapping effort. This data will be integrated into the SPA/RAC database: Mediterranean Biodiversity Platform MPB and therefore will need to be provided in the required GIS format, following the instructions and template that will be shared.

❖ Joint IUCN-MED and SPA/RAC Session on Regional Transversal Issues

38. The afternoon session brought together SPA/RAC and IUCN experts group to discuss two main themes, facilitated by IUCN representative Mrs. Mercedes Muñoz-Cañas, with support from SPA/RAC.

❖ Data Sharing

39. The session began with an introduction by Mrs. Pertuisot, representing the Monk Seal Alliance (MSA), who provided context on the feasibility study to develop a Monk Seal Data Sharing Platform, conducted under Euronatur's coordination, with input from consultants and a dedicated steering group. She also emphasized the consensus reached during the morning IUCN-Med session on the importance of data sharing.

40. Mrs. Lisa Leschinski, representing Euronature, gave an online presentation summarizing the work conducted over the past year, and which led to the development of scenarios for a Mediterranean Monk Seal Data Sharing Platform. This work included a desk review, consultations with existing relevant platforms, and regular meetings with a small, dedicated steering group. While it proved challenging to achieve consensus and develop a fully detailed proposal, one scenario emerged as a preferred option during the study. This scenario, combining the EuroMammals system with a WildMe Wild Book platform as hosts, was presented to the larger community in September for feedback. Although most responses were positive, several questions remain open, and certain aspects require further consultation.

41. An open group discussion followed, addressing the benefits and challenges of different data-sharing approaches. Participants from groups with extensive data and those with limited data shared their perspectives, raising concerns about data ownership, future usage, and the definition of "raw data." Additional unresolved issues included the hosting of habitat-related data, incorporating other data types such as threats, and aligning with the needs of MSA and other international or regional conservation initiatives.

42. Given the complexity of these issues, it was deemed premature by the majority to commit to a single approach. Alternatively, it was proposed to establish a sub-working group that would meet annually to advance discussions and refine objectives, building on the work accomplished with the Feasibility Study. It was proposed that this working group would serve as a platform for sharing information and leveraging existing tools, such as WildMe, as complementary resources to address the identified needs.

❖ Communication

43. This session included initial presentations by IUCN-Med (Mercedes) and discussions on the development of a common communication strategy and how to structure the group communication and send unified shared messages as well as the next steps for the network of experts, ideally with the support of a communication specialist.

44. A dedicated session focused on collaborative work for the SPA/RAC Best practices when encountering a Monk seal document, with feedback and recommendations collected from participants. Key suggestions included creating two types of materials: a simplified version tailored for fishers and a more detailed version for the public. Additional comments on content and scientific accuracy were provided, enabling improvements to the guide. The finalized materials will take the form of posters displayed in relevant locations, following translations into appropriate languages. It was agreed that each country would designate a national expert/coordinator as a reference contact for monk seal encounters.

45. SPA/RAC aims to finalize these communication materials with the support of a graphic designer by the end of the year so that it can be used in 2025.

4. CONCLUSIONS & NEXT STEPS

46. Mrs. Lobna Ben Nakhla expressed gratitude to METU and Dr. Meltem OK for hosting the event, to the Monk Seal Alliance (MSA) for their constant support, and to the trainers for their outstanding knowledge sharing. A special acknowledgment was extended to ISPRA for their active guidance and valuable advice.

47. This second workshop was distinguished by a high level of interaction and the exchange of experiences, not only between trainers and trainees but also through insightful contributions from the broader community of experts thanks to the joint session with the IUCN-Med experts' group.

48. Building on the achievements of the first workshop, this second edition marked another critical step in transferring expertise for monitoring the Mediterranean monk seal regionwide. It introduced additional skills in laboratory analysis and incorporated updated information, further enhancing participants' knowledge. These efforts aim to support more effective conservation measures while reducing the time lost on challenges and mistakes encountered by other working groups.

49. It was reminded that the workshop goals are in line with the IMAP implementation, emphasizing the importance of continuing monitoring efforts aligned with Monk seal regional s Action Plan, national IMAP frameworks, and the regional strategy, regardless of direct funding availability. Participants were warmly encouraged to maintain their dedication and enthusiasm for conservation efforts.

50. Participants were informed that they would receive an evaluation form in the coming weeks to gather feedback on the workshop. (Nb: Results of this survey are available at SPA/RAC and showed a high level of satisfaction)

51. SPA/RAC will maintain the established online group to foster continued collaboration and knowledge sharing. Additionally, further activities will be planned for 2025 to continue the cooperation and answer the recommendations received during the event.

5. 5.Annexes.**5.1 : Initial Agenda**

Time	Activity
11 November 2024	
07:30 – 08:30	Breakfast at the hotel Shuttle will be provided to go to METU facilities at 08:30
09:00 - 09:15	Opening
09:15 – 09:30	Context and objectives
09:30 – 09:45	Introduction on the Mediterranean Monk Seal (biology, habitat, conservation)
09:45 - 10:45	Collection of sightings and evaluation
10:45 - 11:00	Coffee break
11:00 - 12:00	Habitat survey and fieldwork preparation, examples
12:00 – 13:00	Camera trap settings
13:00 - 14:00	LUNCH (at METU facilities)
14:00 – 15:00	Camera trap settings (continued)
15:00 - 16:00	Photo ID /organization of the data
16:00 - 16:15	Coffee break
16:15 – 17: 30	Trophic ecology/Microplastics/Sampling collection introduction
12 November 2024 (Field session)	
07:30 - 17:00	Field trip
13 November 2024	
07:30 - 08:00	Breakfast at the hotel Shuttle will be provided to go to METU facilities at 08 :00
08:30 – 09 :30	Lab session: Cleaning and collection of samples
09:30 – 11 :00	Lab session : Diet analysis (scat analysis)
11:00 – 11:20	Coffee break
11:20 - 13:00	Group discussion on the sustainability of National Monitoring Efforts
13:00 -14:00	LUNCH (at METU facilities)
<i>Open discussion on transversal/regional topics (SPA/RAC and IUCN-Med)</i>	
14:00 - 15:30	Data Sharing - Context and Objectives for a regional data platform- MSA - Presentation of study on data sharing - Euronatur (online) - Discussion about the results and a future common data sharing platform
15:30 - 15:50	Coffee break
15:50 – 17:00	- Common regional communication - Strategy of common communication - Effective internal and external communication - Presentation of regional dissemination material and discussion (SAP/RAC) - Discussion on how to structure group communication
17:30 -17:40	Conclusion of the Workshop (SPA/RAC)
20:00	Dinner at DENİZSUYU RESTORANT (all participants). Shuttle will be provided to go to the common dinner. Planned departure is at 19:45 from the Hot

Annex 5.2: Participant List of the Second Workshop on Mediterranean Monk Seals and Their Habitat Monitoring Methodologies, Mersin, Türkiye, 11–13 November 2024

Name	Country	Position/organisation
Giulia Mo	Italy	Researcher - ISPRA (Italian National Institute for Environmental Protection and Research)
Sabrina Agnesi	Italy	Researcher - ISPRA (Italian National Institute for Environmental Protection and Research)
Samer Fatfat	Lebanon	Palm Island Natural Reserve (PINR) committee member
Kamila Haliche	Algeria	Cheffe d'antenne de la Wilaya de Tizi Ouzou (Commissariat National du Littoral (CNL)- Ministère de l'Environnement et des Energies Renouvelables
Emsaed Bufliga	Libya	Lecturer/Professor at Omar AL Mokhtar University, El bayda (Eastern part)
Almokhtar Said	Libya	Ministry of Environment - Head of Marine and wildlife section
Mustafa Almontassri	Libya	Ministry of Environment - Marine and wildlife section / Technician
Mohamed Alrumayh	Libya	Ministry of Environment - Marine and wildlife section / Technician
Meltem OK	Türkiye	Trainer, Researcher METU-IMS
Luigi Bundone	Italy	Trainer, President of the Board of Directors of Archipelagos - ambiente e sviluppo, Italia; Ca' Foscari University of Venice
Gemma Hernandez- Milian	Spain	Trainer, Archipelagos - ambiente e sviluppo, Italia ; Centro Oceanografico de Vigo, Instituto Español de Oceanografía- Consejo Superior de Investigaciones Científicas/COV, IEO-CSIC; Ca' Foscari University of Venice
Neşe Yapici	Türkiye	SPA/RAC National Focal Point - Department Manager of Species and Habitat Protection - General Directorate for Protection of Natural Asset
Esin Karacaoğlu	Türkiye	hydrogeological engineer - Department Manager of Species and Habitat Protection - General Directorate for Protection of Natural Assets
Lobna Bennakhla	Tunisia	Programme Officer - Species Conservation - SPA/RAC
Julie Belmont	France	International consultant, SPA/RAC
Auriane Pertuisot	Monaco	Monk Seal Alliance Coordinator, Prince Albert II of Monaco Foundation
Wassim Gaidi	Tunisia	MPAs Projects Associate Officer- SPA/RAC

Annex III : Communication Tools Developed Within the MED Monk Seal Project: Enhancing Awareness and Knowledge of the Monk Seal in the Mediterranean

1. Posters

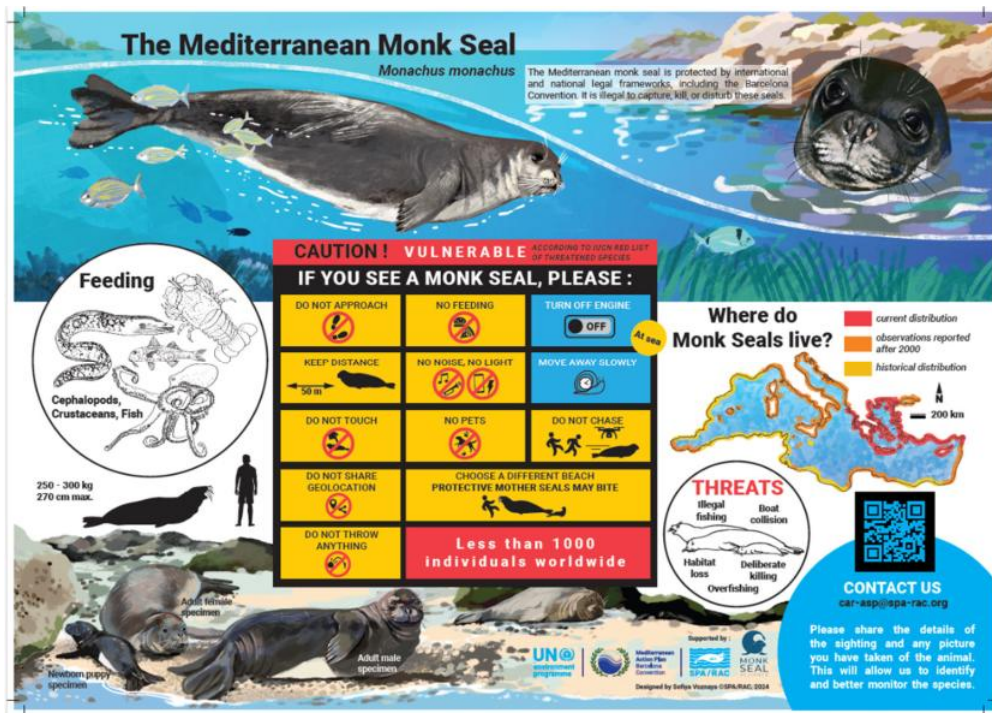


Fig. 1: A guide of best practices when encountering a Monk seal – English Version



Fig. 2: A guide of best practices when encountering a Monk seal – French Version

فقمة الراهب المتوسطية
Monachus monachus

إِذَا شَاهَدْتَ فَقَمَةً، يُرَجَى:

مُعَرَّضَةٌ لِلْخَطَرِ

وفقاً للقائمة الحمراء للأنواع المهددة بالانقراض التابعة للاتحاد الأوروبي لحماية الطبيعة (IUCN)

إطفاء المحرك OFF في البحر	عدم إطعامها	عدم إصدار الضجيج أو استخدام الأضواء	عدم رمي أي شيء	تَوَجَّ الحَدْرَا!
الابتعاد ببطء	عدم ملاحقتها	عدم اصطحاب الحيوانات الأليفة	عدم لمسها	عدم الاقتراب
أقل من 1000 فرد في العالم	اختيار شاطئ آخر الفقمات الأمهات الحارسات قد تعض	عدم مشاركة موقعها الجغرافي	الحفاظ على مسافة 50 متر	

فقمة الراهب المتوسطية مهددة بالانقراض. يرجى تجنب الاقتراب منها أو إطعامها. يرجى تجنب إصدار الضجيج أو استخدام الأضواء.

نموذج: 2024

تواصل معنا
car-aspi@spa-rac.org

نرجو مشاركة تفاصيل مشاهدتك وأي صور قمت بالتقاطها. سيساعدنا ذلك في تحديد الأنواع ومراقبتها بشكل أفضل.

UN@ environment programme
Mediterranean Action Plan Barcelona Convention
SPA/RAC
تعاون دولي لحماية البحر المتوسط

Fig. 3: A guide of best practices when encountering a Monk seal – Arabic Version

2. Comics

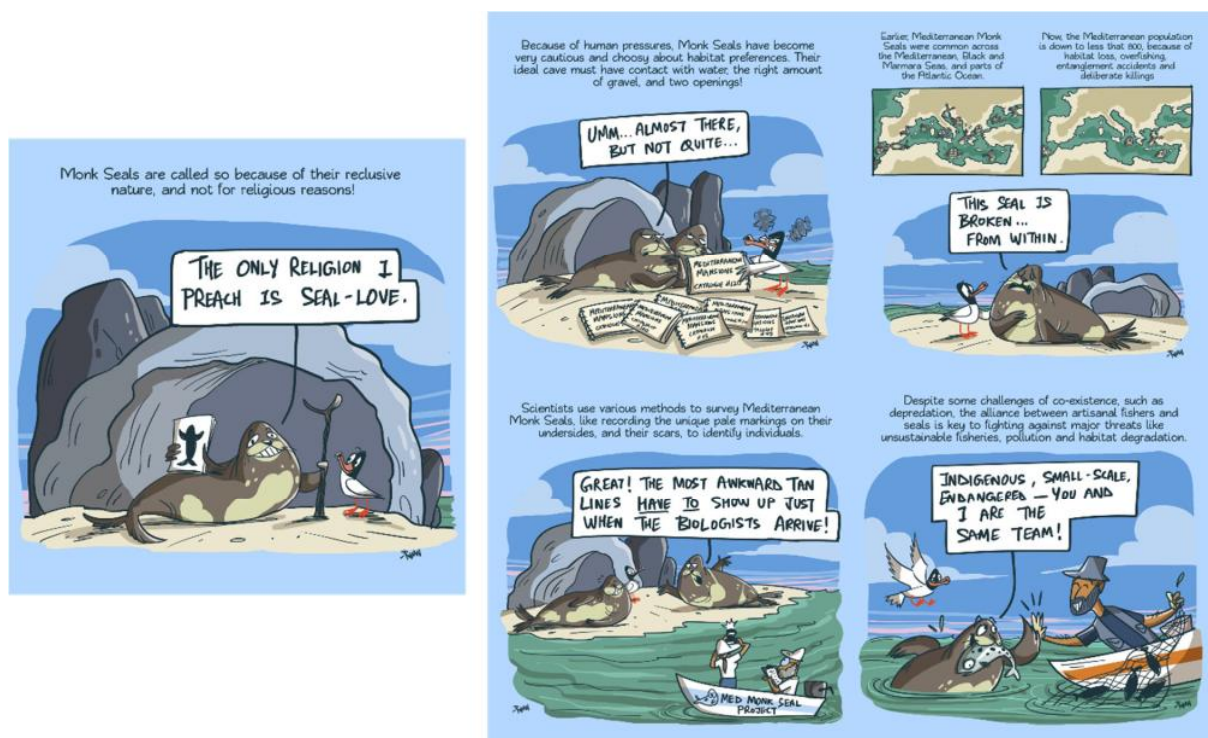


Fig. 4: A series of comics to raise awareness about the Mediterranean Monk Seal (*Monachus monachus*)- English Version

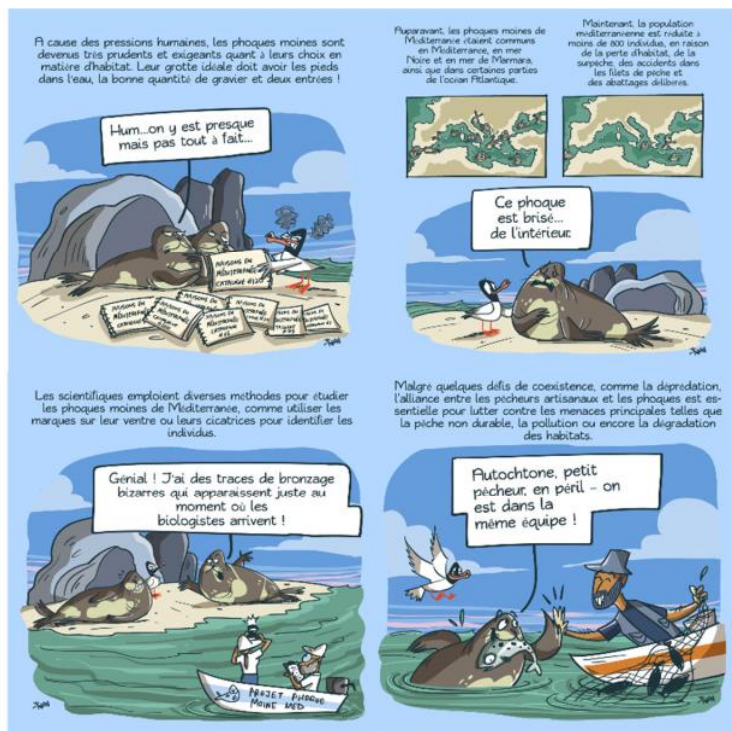


Fig. 5: A series of comics to raise awareness about the Mediterranean Monk Seal (*Monachus monachus*)- French Version