



## Small Grants – Project Completion and Impact Report

*Instructions to grantees: please complete all fields, and respond to all questions listed below.*

<b>Organization Legal Name</b>	<i>Archipelagos - ambiente e sviluppo, Italia</i>
<b>Project Title</b>	Sustainability, threats, presence and habitat use of the Mediterranean monk seal in Albania
<b>Grant Number</b>	CEPF-109941
<b>Date of Report</b>	31 March 2021

**CEPF Hotspot:** Mediterranean Basin

**Strategic Direction:** 1 Support Civil society to engage stakeholders in demonstrating integrated approaches for the conservation of biodiversity in coastal area

**Grant Amount:** 20.000 US \$ (twenty thousand US dollars)

**Project Dates:** 8<sup>th</sup> April 2019 – 31 March 2021

### **PART I: Overview**

#### **1. Implementation Partners for this Project (*list each partner and explain how they were involved in the project*)**

The project was planned and managed by “Archipelagos - ambiente e sviluppo, Italia”. Our organization was in charge of training the personnel of the “National Marine Park Karaburun-Sazan” (NMP K-S) on how to perform some of the activities: 1. install and substitution of cameras; 2. collection and filtering of water samples; 3. analysis of data; 4. review and summarize the outcomes and deliverables; 5. Contributing to conferences and peer-reviewed journals. According to the variation that the project underwent, due to some of the problems we encountered, including the COVID-19 pandemic, some of the activities could not be performed as planned. Therefore, additional activities were re-designed and carried out. The text of a questionnaire, previously designed and applied in another area of the Mediterranean Sea by Dr. Luigi Bundone (president of the board of directors of “Archipelagos - ambiente e sviluppo, Italia”), to evaluate fishermen category trade-off in marine ecosystems conservation, was adapted to the local situation. Fishermen were individually approached by a member of RAPA Vlora to conduct the interview. All the fishermen interviewed are part of the network of information collaborating with the park managing authority. A database of monk seal sightings was built, in substitution of the originally planned Photo-id database. The collection of a monk seal scat during the habitat availability survey, performed in August 2019, allowed us to add analysis of ecological and

anthropogenic influences that monk seal individuals are exposed to in the area. Dr. Gema Hernandez-Milian, scientific advisor and founding member of “Archipelagos - ambiente e sviluppo, Italia”, contributed to the data analysis and the project and particularly for the analysis of the monk seal scat. The scat was analysed for diet remains and preliminary microplastic identifications, in collaboration with the Marine Research Institute-Spanish National Research Council (IIM-CSIC). Vigo, Spain. Agreement was also done with Dr. Amy Lusher, Norwegian Institute for Water Research (NIVA) in Oslo (Norway), for additional more exhaustive microplastic analysis.

The local partner to support the project and create the initial contacts was the Albanian Center for Environmental Protection and Sustainable Development (ACEPDS). ACEPDS allowed the strengthening of local contacts, particularly with the personnel of the managing authority of the Karaburuni-Sazani National Marine Park, the Regional Administrative of Protected Areas (RAPA) Vlora. Additionally, it provided echoes on the social networks of some of the activities and results achieved.

All the practical applications of the activities were developed and carried out in tight collaboration with RAPA Vlora. RAPA Vlora aided and provided the support vessels for the suitable habitat availability survey, conducted by one expert of our organization in August 2019. Additionally, following the training, their personnel installed and substituted the infrared cameras in the selected caves to be monitored; as well as collected (from selected hot spots) and filtered the water samples for microplastic analysis. RAPA Vlora was also responsible to co-organize and carry out the beach cleaning event, and distribute the questionnaire to the fishermen community of Orikum and Radhima. RAPA Vlora additionally organized the workshop “Identity measures to prevent Marine litter generation in Karaburuni-Sazani National Marine Park” 02 November 2019. Since some of the aspects were overlapping with the present project intents our organization was invited to take part. Following the monk seal sightings reported in 2019, RAPA Vlora set up a network of information for marine species encounters involving local fishermen, allowing direct communication about Mediterranean monk seal sightings. The fishermen, within the network, with their mobile phone communicate to the managing authority of the marine national park to collect information related to encounters with marine species (including the monk seal) providing date, position and if possible image of the animal/s encountered.

The Laboratory of Materials Characterization of the Ca' Foscari University of Venice (Italy) kindly provided the filtering system for the water samples. The supposed analysis of the water samples were postponed to undetermined date due to the inaccessibility of the laboratories for safety reasons (Covid 19).

## **2. Summarize the overall results/impact of your project**

### **1) Record suitable available habitat, its actual use and individual identification by Mediterranean monk seal specimens along the Karaburuni-Sazani National Marine Park**

All the information on the presence and habitat use by the Mediterranean monk seal in Albania, up to 2017, available from official documents, scientific and grey publications, were thoroughly collected and reviewed. The species presence along the country coast was acknowledged in documents of international authority for the protection of the environment, such as the International Union for the Conservation of Nature-IUCN, United Nations Environmental Programme/Mediterranean Action Plan-UNEP/MAP, Specially Protected Areas Regional Activity Center-SPA/RAC, and General Fisheries Commission for the Mediterranean-GFCM. However, in

none of those, as well as in all the other publications collected and reviewed, were not found specific data on the monk seal' former population consistency, reproductive activities, or even reference to habitat actually used in Albania. Our researches have led us to collect general data on the sporadic presence of individual monk seals, pointing out to the Southern Albanian coast, from the Karaburuni peninsula to the Greek border, as the area where most of these sightings took place. This information was related to the years between the 40s up to the 90s. More specific information were available for the sightings reported between 2000 and 2017. Also, in this case, the majority of the data pointed out the Southern coast of the country.

The Mediterranean monk seal nowadays uses preliminarily marine caves to haul out, rest, and give births. Along the coasts of Albania, the Island of Sazani and the peninsula of Karaburuni are the part mainly characterized by high cliff, relatively deep water, and represent the area where are most concentrated marine caves. Therefore, we survey the ~65 km of Karaburuni-Sazani National Marine Park as the most probable area where to find suitable habitat for the use by the species, along with a segment of the coast between Radhima and Vlora, where seal sightings were recorded in 2019.

Eight caves, the ones that presented the morphological characteristic as potentially suitable habitat for the species use, were mapped; two, the ones with the best characteristics, were equipped with infrared cameras. In one of the two, a monk seal scat was retrieved, which confirms its effective use by the species. By the collection of a monk seal scat inside a marine cave, we documented for the very first time habitat used by the species in Albania. Individual seals were captured by the infrared cameras in both of the caves confirming their effective use by the species.

Recent monk seal sightings were collected and verified. However, only those provided with video or photographic documentation were analysed to avoid any possible bias and avoid overestimation or to mistakenly record a re-colonization. A total of thirteen sightings were verified and confirmed. All the images collected, by direct witness or through the infrared cameras were analysed for photoidentification. However, the quality and quantity of images collected did not allow a proper individual identification. Consequently, instead of the photo id database, it was designed in substitution a sighting database.

The scat collected was processed for prey identification. The remains analysis, mainly scales, allowed the identification of three fish preys, two of which are also the species farmed in the fish farms present in the Bay of Vlora.

## 2) Evaluate micro and macro plastic presence along the available habitat of Mediterranean monk seal in the Karaburuni-Sazani National Marine park

Macroplastic presence evaluation along the coasts of the Karaburuni-Sazani National Marine Park was designed to be carried out through a) visual census during the cave survey; b) photographic record of plastic accumulation through the infrared cameras installed in the monitored caves.

Macroplastic accumulation in the cave monitored was almost neglectable. Only a plastic bag and a rope were collected from one of the internal beaches in one of the caves. The infrared cameras did not capture images depicting plastic debris incidence. This might be due to different reasons: the area does not present a sink area characteristic, strong currents during the survey might re-shaped frequently the internal beaches of the caves, anthropogenic activities might not be close enough to facilitate the arrival of this material, etc.

The beaches cleaning event, that was performed on the 21st October 2020, nevertheless, to clean five beaches on the Eastern coast of the Karaburuni peninsula (all located inside the territory of the park) covering a surface of 3.867 m<sup>2</sup>, allowed the collection of 44,1 kg of anthropogenic debris of which 9,5 of different plastic materials.

Microplastic evaluation was designed to be obtained through the collection of water samples in selected hot spots. Those spots in the original project were supposed to be in the close vicinity of the entrances of the caves monitored. However, since only two caves were decided to be monitored with infrared cameras, further spots were added to the water samples collection, chosen in relation to different human pressure places inside the Bay of Vlora and along the Karaburuni peninsula.

Only seven samples were collected up until the filtration system failed and could not be repaired. The particles retained in the filters were stored dry and sent to the Laboratory of Materials Characterization of the Ca' Foscari University of Venice (Italy) for identification. Access to the Ca' Foscari labs is not allowed yet due to the Covid-19 pandemic, Therefore the analysis will not be carried out and fulfilled by the end of this project. The monk seal scat collected was also analysed by Dr. Hernandez-Milian for preliminary evaluation of the incidence of anthropogenic debris, in particular, to investigate the potential trophic transfer of microplastic pollutants. The anthropogenic items retrieved included a piece of nylon, that could belong to fishing or aquaculture nets, and many transparent particles, that could belong to the filtration systems used in aquaculture. All the particles were sent to Dr. Lusher for further microplastic analysis (polymer identification). The access to labs to carry out analysis is at the moment limited due to the pandemic. Therefore, the analysis will not be carried out and fulfilled by the end of this project.

### 3) *Raise awareness and direct participation in addressing the threats and their possible mitigation with local communities and stakeholders*

In the original plan of the project, this point was supposed to be carried out by organizing two meetings with local communities and stakeholders and by organizing two beach cleaning events. Due to different constraints, the project was re-organized with some variations from the original plan. Some activities, previously mentioned, were added, meanwhile, some others could not be performed. The two meetings were not organized; however, our organization was invited by RAPA Vlora to the workshop "Identity measures to prevent Marine litter generation in Karaburuni-Sazani National Marine Park" on 02 November 2019 in Vlora. The workshop, attended by 30 participants RAPA Vlora, UNDP, Regional Activity Centre for Sustainable Consumption and Production SCP/RAC, Ministry of Tourism, NGOs representative (Royal Albania Foundation) and representative of the tourist sector operating in Karaburuni (bars and restaurants owners), focused on the problem generated by marine litter, addressing their possible measures to mitigate their impact. The main aim of the workshop was the involvement of local stakeholders along with the managers of the MNP. The advisory panel of the workshop was composed of national and international experts which helped to evaluate measures and to elaborate proposals to reduce the problem created by marine litter at the coast of NMP Karaburuni-Sazani. The land-source of litter at the National Park comes from the seasonal tourists spending time in the area. These tourists might bring litter and the waste management plan for the National Park needs to be improved to address this issue. The main measures proposed in accordance with all the participants included short-term measures:

1. Improvement of garbage's collecting capacity providing collecting cups, available on the touristic structures in the territory of the park (beach bars);

2. Recollection and transportation of garbage in collaboration with the touristic boats, along with the implementation of waste recycling from local businesses and awareness and informative material for tourists and touristic activities.

The use of a biological method of waste treatment (Landfill Operation), and the implementation of fines for non-authorized abandonments of garbage within the park territory were proposed as long-term measures.

Only one beach cleaning event was possible to be organized in October 2020. A total of 15 participants were trained to carry out the cleaning activities supported by two boats. Part of the participants was from RAPA Vlora, from the prefecture and municipality of Vlora, they were joined by other stakeholders in the work team (journalists, teachers, local NGO, and local fishing associations). During the beach cleaning, five beaches at the Eastern coast Karaburuni peninsula were surveyed. The marine litter recovered was brought to Karaburuni-Sazani National Marine Park Visitor Centre and delivered to the waste public service.

To address the fishermen category our organization provided a questionnaire to evaluate the possible threats to which the monk seal might be exposed, particularly dynamite fishing, to RAPA Vlorë. The intent of the questionnaire was also to evaluate the fishermen's willingness to actively contribute to the protection of the local environment. The questionnaire was structured with 17 questions. A total of 11 fishermen from the port of Radhima and Marina of Orikum participated. Our data confirmed previous analysis on the local fishery sector as well as on the fishermen positive attitude towards the National Marine Park. Fishermen reported different net damages during their activities based on pre-codified answers. Most of the fishermen reported as the most common damage the presence of single holes and stretches of nets. It is important to take into consideration that most of the fishermen indicated that they believe that there has been a decrease in catch through the years; in fact, 82% of questioned fishermen reported that the overfishing might be the main cause of this depletion, while only one fisherman pointed out to illegal fishing and another one to pollution. Fishermen were asked about being implicated in the managing decisions for the protection of the marine territory, and answers were mainly positive (91%). In addition, 82% of surveyed fisherman expressed interest to take part in scientific studies. Fishermen were asked which limitations they are willing to accept or negotiate for the protection of the territory (trade-off). The establishment of no-fishing zones was the most preferred option (eight out of 11 fishermen, 73%), followed by limiting the type of catch (2) and the fishing season (1). Unfortunately, the issue of illegal fishing using dynamite was not possible to be addressed with the answers of the fishermen to the questionnaire.

The analysis of the scat allowed the identification of seabass and seabream in the diet of a specimen frequenting the area. Additionally, the analysis of anthropogenic particles encountered revealed a piece of nylon belonged to fishing or aquaculture nets, and several small transparent particles, hypothesized to belong to the filtration systems used in aquaculture. Seabass (*Dicentrarchus labrax*) and seabream (*Sparus aurata*) are the two species farmed in the fish farms inside the Bay of Vlora. A direct connection cannot be proved. However, these findings were sufficient to suggest engaging in further studies of possible negative interaction between fish farms and marine vertebrates to avoid the uprising of possible threats.

**3. Briefly describe actual progress towards each planned long-term and short-term impact (as stated in the approved proposal)**

*List each long-term impact from your proposal*

a. Planned Long-term Impacts - 3+ years (as stated in the approved proposal)

Impact Description	Impact Summary
<p>Contribute to the overall conservation and survival of the monk seal in the Mediterranean</p>	<p>The analysis of the monk seal’s former presence, present sightings, and habitat availability and its effective use, constitutes the base for a proper conservation strategy, contributing to the recovery of the species as well as for the survival of every single specimen. Our study for the first time unveiled that despite the presence of the species along the country coast was acknowledged, it was completely ignored the consistency of such presence or even actual habitat used by the animals. The analysis of the retrieved information allowed to identify the coast of the Karaburuni-Sazani National Marine Park as the area where to concentrate efforts for the monitoring and protection of the species.</p> <p>Additionally, it was proved for the very first-time actual habitat use by the specimens (marine cave) along the area surveyed. Albania, with its position along the Adriatic-Ionian Basin, represents an important corridor for the recovery of the species where to put in practice national and multinational good conservation practice to aid its permanent natural re-establishment as well as consent safe movement of the specimens within the country territory.</p>
<p>Converge into a common Adriatic Ionian Region Strategy for the protection of the marine and coastal heritage</p>	<p>The results of this first project along with its implementation in time converged into the Specially Protected Areas Regional Activity Centre (SPA/RAC) project proposal “Med-Monk seal Project: Enhancing knowledge and awareness on monk seal in the Mediterranean” submitted to the Monk Seal Alliance. The project is in its final approval phase.</p> <p>To adequately monitor and preserve one of the natural biodiversity heritages, at a local level, requires the implementation and reinforcement of the structures responsible for its conservation (the MNP K-S), with the active involvement of local stakeholders (tourist sector and fishermen in particular). At a wider-area level, considering the overall monk seal situation within the Adriatic and Ionian Sea the national commitment towards the species should be planned alongside a network of actors from the surrounding countries.</p>

b. Planned Short-term Impacts - 1 to 3 years (as stated in the approved proposal)

Impact Description	Impact Summary
<p>Improve the knowledge of habitat availability and presence of Mediterranean monk seals along the coast of Albania</p>	<p>Thorough bibliographical research on all the available information towards the past presence of the species reveals only data referring to occasional sightings. No information could be retrieved on specific habitats used by the species. On the other end, all bibliographical sources outlined the Southern coast of Albania as the area where most of these encounters took place (from Karaburuni to the Greek border).</p> <p>By the analysis of the recent sightings (2019-2020), it could not be stated if the coast was frequented by one or more animals during the period of the project. In spite of this, in accordance with the bibliographical information on the past frequentation, it was outlined the relevance of Albania, and particularly the territory of the NMP K-S, as at least an important corridor for the species.</p> <p>The about 65 km of the coast of the Karaburuni-Sazani National Marine Park, along with a segment of the coast between Radhima and Vlora, were surveyed to identify suitable habitat (marine caves) for the species. Eight caves were mapped as potential habitats for the species. A monitoring system (infrared cameras) was installed, in the two caves presenting the best morphological characteristics for the potential use by the species. In one of those, a monk seal scat was collected. Individual seals were photographed in both of the caves monitored, confirming their effective use.</p>
<p>Set a data baseline on the threats that affect the quality of the ecosystem, its biodiversity and their possible mitigation</p>	<p>On the basis of the data collected and analyses a preliminary threats evaluation report was developed with the following recommendations for mitigation measures for threats to monk seal presence and to its stable frequentation of the area:</p> <p>Improve the macroplastic collection within the NMP-KS and recycling in the area. On a long-term basis, establishing waste treatment (Landfill Operation), in conjunction with fines for non-authorized abandons of garbage within the park territory.</p>

	<p>Following the recommendations from the Marine Strategy Framework Directive, long-term monitoring of microplastic, from both water samples and biota, is necessary. Additionally, the use of scats has been recently demonstrated that could be used as a non-invasive technique.</p> <p>The interviews with the fishermen showed their willingness to collaborate in the management and protection process of marine natural resources. This collaboration might create opportunities to engage in mutually beneficial activities. For instance, fishermen can provide useful information of top predators occurring in the area and their behaviour with their activities. Fishermen's involvement and long-term protection policy are essential to achieve effective conservation results for the Mediterranean monk seal.</p> <p>Damage to fish-farm cages should be investigated. The information obtained might help to prevent or mitigate any possible negative interaction that might arise from Mediterranean monk seals (re-establishing in the area). To date, we cannot confirm that if the presence of seals increases in the area, it will correspond to an increment of negative interactions, but the collaboration with fish-farms will provide useful information to investigate this potential threat.</p>
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**4. Describe the success or challenges of the project toward achieving its short-term and long-term impacts**

Despite the challenges encountered, short-term impacts were achieved and worked towards long-term impacts achievement.

The entire Project start was delayed and its duration prolonged. The delayed start is to be attributed mainly to start a project in a foreign country without previous experience there. The results achieved were very useful to strengthen the relationship and mutual trust between RAPA Vlora and our organization.

The infrared camera installation was initially postponed for adverse weather conditions to be jointly installed on January/February 2020. The explosion of the COVID-19 pandemic, obliged the personal of RAPA Vlora to perform this activity without our specialist intervention in the field. Thanks to the prolongments of the project, however, the monitoring activities demonstrated the effective use of the caves by seals individuals.

Bureaucratic and practical problems also postponed the organization of the first meeting with the stakeholders along with the beach cleaning event. The pandemic contributed to increase the difficulties in organizing such activities. However, the evaluation of the eventual threats to the species was achieved adding to the project the analysis of data derived from the collection of a monk seal scat and by applying a questionnaire to the fishermen.

**5. Were there any unexpected impacts (positive or negative)?**

Due to some constraints, the project underwent some variations from the original plan. The lack of previous knowledge of the area in a foreign country, the difficulties in exchanging both practical and local knowledge, the accessibility to the area due to travel and weather issues, as well as the Covid-19 pandemic caused some difficulties and reasonable delays.

Two workshops with stakeholders could not be organized, and only one beach cleaning event could be organized.

The water sampling collection was limited by the failure of the filtering systems that were not possible to be replaced.

Access to laboratories to perform microplastic analysis was and still is, not possible.

The installation and subsequent replacement of the cameras did not follow our timeline schedule program.

On the other hand, the collection of a monk seal scat allowed us to have a preliminary confirmation of habitat use by the species. It offered also the chance to investigate ecological aspects and anthropogenic debris incidence in the monk seal diet. Additionally, it provided the chance to point out interactions with fish farms that might lead to threats to be taken into consideration.

Due to the constraints that did not allow organize meetings with stakeholders, we implemented our project by distributing a questionnaire to fishermen. Besides, thanks to the involvement by RAPA Vlora, we have been included in an already programmed workshop on marine litter. Our organization was invited as foreign observer and participated in the discussions about the problems related to marine litter and possible solutions to apply.

All of the above problems contributed to the prolongment of the project. This situation allowed us to record usage of caves by seals, detected by the cameras in December 2020, January, and February 2021. This fact, communicated on Facebook by RAPA Vlora, amplified the resonance and importance of protecting the monk seal as heritage of the area as well as of the country, up to receiving direct ministerial congratulations.

The photo id catalogue of seals frequenting the coast could not be elaborated due to the low quality and quantity of the video/photographic material. However, a database of monk seal sightings (2019-2021) was designed and realized as a deliverable in substitution of the aforementioned ID catalogue to RAPA Vlora.

**PART II: Project Components and Products/Deliverables**

**6. Components (as stated in the approved proposal)**

*List each component and product/deliverable from your proposal*

6. Describe the results for each deliverable:

Component	Deliverable
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#	Description	Sub-#	Description	Results for Deliverable
1	Catalogue of the potential suitable habitat (marine caves) for the Mediterranean monk seal, <i>Monachus monachus</i> , in the National Marine Park Karaburun-Sazan		The catalogue is composed of cards containing the information of the caves identified and mapped during the habitat survey with GPS coordinates	The catalogue represents the first and preliminary database of habitats potentially available for the species (marine caves) along the coast of Albania. Additionally, it includes the first evidence of habitat actually used by the species along the country coasts (the two caves monitored). The evidence is represented by the scat recovered in one of the two caves along with the pictures of a seal using both caves, done by infra-red camera. The catalogue is part of the deliverables to RAPA Vlora and to the project funders.
2	Database of Mediterranean monk seal sightings along the coast of Albania		Each sighting has been organized in record with related information (date, location, etc.)	In the database are organized the monk seal sightings directly collected during the project (2019-2021). And it is the base where future sightings should be stored and compared by the park managing authority. The database is part of the deliverables to RAPA Vlora and to the project funders.
3	Preliminary evaluation of threats and possible mitigation actions for the natural re-colonization of the Mediterranean monk seal ( <i>Monachus Monachus</i> ) along the coast of Albania		Report of the activities related to the evaluation of the threats and related recommendations for the mitigation measures	Macroplastic evaluation was performed through the analysis of accumulation in caves, the beach cleaning event, and the recommendations of the workshops we were invited to. Microplastic evaluation, although incomplete due to the absence of the final laboratory analysis, was performed by the collection of water samples and by the preliminary analysis of anthropogenic debris accumulation in the scat retrieved. Fishermen's willingness to collaborate for the protection of the natural environment was analysed through the use of a questionnaire specifically adapted. Further considerations were added on possible negative interactions that might arise with fish farm. The report is part of the deliverables to RAPA Vlora and to the project funders.
4	Communication to conferences and peer reviewed publications	1	All the results achieved were submitted and/or presented to conferences	Already presented 1) Bundone, L. Panou, A. Kokkolis, T. Aravantinos, P. Hysolako, N. Mehilaj, T. Bakiu, R. 2019. "Coordinated monitoring of the Mediterranean monk seal among MPAs in the Adriatic-Ionian macro-region". MedPAN Network Regional Experience-Sharing Workshop 11-14 November 2019, Akyaka, Turkey.

				<p>2) Bundone, L. Hernandez-Milian, G. Hysolakoj, N. Bakiu, R. Mehillaj, T. Lazaj, L. 2021. Mediterranean monk seal in Albania: historical presence, sightings and habitat availability. 1<sup>st</sup> International Conference on Water Environmental Protection and Sustainable Development WEPSD-2021. 17-18 May 2021, Tirana, Albania. The Conference was realised as a combination of on-site and on-line contributions.</p> <p>Submitted:</p> <p>1) Bundone, L. Hernandez-Milian, G. Hysolakoj, N. Bakiu, R. Mehillaj, T. Lazaj, L. Lusher, A. Pojana, G. 2021. First documented use of caves along the coast of Albania by Mediterranean monk seals. Ecological and conservation inferences. 24<sup>th</sup> Biennial Conference on the Biology of Marine Mammals of the Society for Marine Mammalogy. 13-17 December, Florida, USA. Accepted as a poster presentation, 16<sup>th</sup> June 2021.</p>
		2	All the results achieved were submitted to peer reviewed journal or are in preparation	<p>Under review</p> <p>1) Bundone, L. Hernandez-Milian, G. Hysolakoj, N. Bakiu, R. Mehillaj, T. Lazaj, T. 2021. Mediterranean monk seal in Albania: historical presence, sightings, and habitat availability. Journal of Environmental Protection and Ecology. The manuscript was reviewed and accepted and is under final re-submission.</p> <p>In preparation</p> <p>1) Bundone, L. Hernandez-Milian, G. Hysolakoj, N. Bakiu, R. Mehillaj, T. Lazaj, L. Lusher, A. Pojana, G. 2021. First documented use of caves along the coast of Albania by Mediterranean monk seals. Ecological and conservation inferences.</p>

**7. Please describe and submit any tools, products, or methodologies that resulted from this project or contributed to the results.**

The following methodologies and tools contributed to the project results:

- To evaluate macro-plastic impact, we used direct visual census of the material accumulated inside selected marine caves during the in caves activities, indirect visual census by the analysis of the material accumulated inside the monitored caves with infrared cameras, and direct census of the material collected during the beach cleaning event.
- Microplastic contaminant were evaluated sampling superficial sea water in chosen hot spots and through the analysis of a monk seal scat, retrieved in one of the marine caves surveyed. Collecting and analysing procedure and protocols were agreed between

- Archipelagos - ambiente e sviluppo, Italia, the Laboratorio di Caratterizzazione dei Materiali (University Ca' Foscari) and the Norwegian Institute for Water Research-NIVA (Oslo, Norway). The filtering system for the sea water sample was furnished by the Laboratorio di Caratterizzazione dei Materiali.
- Monk seal diet analysis from the scat collected were performed following the protocols and skills of the scientific advisor of Archipelagos – ambiente e sviluppo, Italia, Dr. Gema Hernandez-Milian, and carried out in the laboratories of the Marine Research Institute-Spanish National Research Council-IIM CSIC in Vigo, Spain.
  - The questionnaire to fishermen used to evaluate trade-off was adapted from the one developed from the PhD research of the President of the Board of Directors of Archipelagos - ambiente e sviluppo, Italia, Dr. Luigi Bundone.
  - Habitat survey, cave monitoring, and photoidentification tools and methodologies were developed in time by our organization also in tight collaboration with our sister organization Archipelagos – environment and development (Greece), through exchanges of experiences with the foundation CBD habitat (Spain), and with constant confrontations with other researchers in the field.

### **PART III: Lessons, Sustainability, Safeguards and Financing**

#### **Lessons Learned**

#### **8. Describe any lessons learned during the design and implementation of the project, as well as any related to organizational development and capacity building.**

Consider lessons that would inform:

- Project Design Process (*aspects of the project design that contributed to its success/shortcomings*)

Essential to the design and initial phase of the project was the participatory approach - involvement of local partner and collaborator in project preparation

- Project Implementation (*aspects of the project execution that contributed to its success/shortcomings*)

This was Archipelagos - ambiente e sviluppo, Italia first small grant financed by CEPF. One of the aspects of main relevance was the complete support received from the CEPF team, on how to act in some of the challenging situations encountered as well as for the Covid-19 pandemic.

- Describe any other lessons learned relevant to the conservation community.

Successful conservation projects require time, long-term planning as well as accurate knowledge of the local culture and environment. The Know-how transfer of methodologies cannot consist simply of training some local organization on a specific issue. The risk of slip into big errors of evaluation, or incorrectly applying the learned methodologies, can be quite common. We avoided or at least limited such situations, with a frequent confrontation on how to carry out the different activities. Eventually

readapting the activities, themselves, to the changes of situations (including weather conditions as well as an unexpected epidemic).

**Sustainability / Replication**

**9. Summarize the success or challenges in ensuring the project will be sustained or replicated, including any unplanned activities that are likely to result in increased sustainability or replicability.**

In the initial agreement with the local collaborator, RAPA Vlora has already stated the importance to implement and continue the monitoring and conservation project from a long-term view and through a collaborating network of actors within a wide extranational approach. Through our support, the project was included in the SPA-RAC project as well as continue to be supported (even if on a limited amount of money for this year) by OceanCare.

**Safeguards**

**10. If not listed as a separate Project Component and described above, summarize the implementation of any required action related to social or environmental safeguards that your project may have triggered.**

Reporting on safeguards described in separated Process Framework Safeguard document.

**Additional Funding**

**11. Provide details of any additional funding that supported this project and any funding secured for the project, organization, or the region, as a result of CEPF investment**

**a. Total additional funding (US\$)**  
10.021,86 \$ (USD)

**b. Type of funding**

Please provide a breakdown of additional funding (counterpart funding and in-kind) by source, categorizing each contribution into one of the following categories:

Donor	Type of Funding*	Amount	Notes
OceanCare	A	6.000,00 \$	Their financial support will not end with the conclusion of this first project in order to guarantee a continuity between the CEPF project and the SPA/RAC one
Archipelagos - ambiente e sviluppo Italia	A	4.021,86 \$	In-kind

\* Categorize the type of funding as:

- A *Project Co-Financing (other donors or your organization contribute to the direct costs of this project)*
- B *Grantee and Partner Leveraging (other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF funded project)*
- C *Regional/Portfolio Leveraging (other donors make large investments in a region because of CEPF investment or successes related to this project)*

**Additional Comments/Recommendations**

**12. Use this space to provide any further comments or recommendations in relation to your project or CEPF.**

According to the final approval of the SPA/RAC project we strongly recommend a further project development support by CEPF as co-funder. The project is still in waiting of its final approval that should be proclaimed within May-June 2021. However, the final confidential proposal is in the documentation attached.

**PART IV: Impact at Portfolio and Global Level N/A**

CEPF requires that each grantee report on impact at the end of the project. The purpose of this report is to collect data that will contribute to CEPF’s portfolio and global indicators. CEPF will aggregate the data that you submit with data from other grantees, to determine the overall impact of CEPF investment. CEPF’s aggregated results will be reported on in our annual report and other communications materials.

**Ensure that the information provided pertains to the entire project, from start date to project end date.**

**Contribution to Portfolio Indicators**

**13. If CEPF assigned one or more Portfolio Indicators to your project during the full proposal preparation phase, please list these below and report on the project’s contribution(s) to them.**

Indicator	Narrative
Number of cross-border networking relationship (2)	As a consequence of this project, our organization was invited to join the MedPAN network. Additionally, the results of this project along with future endeavours were included by SPA/RAC* to be part of a Network of actors for an international project for the protection and monitoring of the monk seal.

\* Specially Protected Areas Regional Activity Center

**Contribution to Global Indicators**

**Please report on all Global Indicators (sections 16 to 23 below) that pertain to your project.**

#### 14. Key Biodiversity Area Management

##### Number of hectares of Key Biodiversity Areas (KBA) with improved management

Please report on the number of hectares in KBAs with improved management, as a result of CEPF investment. Examples of improved management include, but are not restricted to: increased patrolling, reduced intensity of snaring, invasive species eradication, reduced incidence of fire, and introduction of sustainable agricultural/fisheries practices. Do not record the entire area covered by the project - only record the number of hectares that have improved management.

If you have recorded part or all of a KBA as newly protected for the indicator entitled “protected areas” (section 17 below), and you have also improved its management, you should record the relevant number of hectares for both this indicator and the “protected areas” indicator.

Name of KBA	# of Hectares with strengthened management *	Is the KBA Not protected, Partially protected or Fully protected? Please select one: NP/PP/FP

*\* Do not count the same hectares more than once. For example, if 500 hectares were improved due to implementation of a fire management regime in the first year, and 200 of these same 500 hectares were improved due to invasive species removal in the second year, the total number of hectares with improved management would be 500.*

#### 15. Protected Areas

##### 15a. Number of hectares of protected areas created and/or expanded

Report on the number of hectares of protected areas that have been created or expanded as a result of CEPF investment.

Name of PA*	Country(s)	# of Hectares	Year of legal declaration or expansion	Longitude**	Latitude**

*\* If possible please provide a shape file of the protected area to CEPF.*

*\*\* Indicate the latitude and longitude of the center of the site, to the extent possible, or send a map or shapefile to CEPF. Give geographic coordinates in decimal degrees; latitudes in the Southern Hemisphere and longitudes in the Western Hemisphere should be denoted with a minus sign (example: Latitude 38.123456 Longitude: -77.123456).*

##### 15b. Protected area management

If you have been requested to submit a Management Effectiveness Tracking Tool (METT), please follow the instructions below. If you have not been requested to submit a METT, please go directly to section 16.

Should you want to know more about the monitoring of protected area management effectiveness and the tracking tool, please click [here](#).

Download the METT template which can be found on [this page](#) and then work with the protected area authorities to fill it out. Please go to the Protected Planet website [here](#) and search for your protected area in their database to record its associated WDPA ID. Then please fill in the following table:

WDPA ID	PA Official Name	Date of METT*	METT Total Score

*\* Please indicate when the METT was filled by the authorities of the park or provide a best estimate if the exact date is unknown. And please only provide METTs less than 12 months old.*

Please do not forget to submit the completed METT together with this report.

## 16. Production landscape

Please report on the number of hectares of production landscapes with strengthened management of biodiversity, as a result of CEPF investment. A production landscape is defined as a landscape where agriculture, forestry or natural product exploitation occurs. Production landscapes may include KBAs, and therefore hectares counted under the indicator entitled “KBA Management” may also be counted here. Examples of interventions include: best practices and guidelines implemented, incentive schemes introduced, sites/products certified and sustainable harvesting regulations introduced.

### Number of hectares of production landscapes with strengthened management of biodiversity.

Name of Production Landscape*	# of Hectares**	Latitude***	Longitude***	Description of Intervention

*\* If the production landscape does not have a name, provide a brief descriptive name for the landscape.*

*\*\*Do not count the same hectares more than once. For example, if 500 hectares were strengthened due to certification in the first year, and 200 of these same 500 hectares were strengthened due to new harvesting regulations in the second year, the total number of hectares strengthened to date would be 500.*

*\*\*\* Indicate the latitude and longitude of the center of the site, to the extent possible, or send a map or shapefile to CEPF. Give geographic coordinates in decimal degrees; latitudes in the Southern Hemisphere and longitudes in the Western Hemisphere should be denoted with a minus sign (example: Latitude 38.123456 Longitude: -77.123456).*

**17. Beneficiaries**

CEPF wants to record two types of benefits that are likely to be received by individuals: structured training and increased income. Please report on the number of men and women that have benefited from structured training (such as financial management, beekeeping, horticulture) and/or increased income (such as from tourism, agriculture, medicinal plant harvest/production, fisheries, handicraft production) as a result of CEPF investment. Please provide results since the start of your project to project completion.

**17a. Number of men and women receiving structured training.**

# of men receiving structured training *	# of women receiving structured training *
2	

*\*Please do not count the same person more than once. For example, if 5 men received structured training in beekeeping, and 3 of these also received structured training in project management, the total number of men who benefited from structured training should be 5.*

**17b. Number of men and women receiving cash benefits.**

# of men receiving cash benefits*	# of women receiving cash benefits*

*\*Please do not count the same person more than once. For example, if 5 men received cash benefits due to tourism, and 3 of these also received cash benefits from increased income due to handicrafts, the total number of men who received cash benefits should be 5.*

**18. Benefits to Communities N/A**

CEPF wants to record the benefits received by communities, which can differ to those received by individuals because the benefits are available to a group. CEPF also wants to record, to the extent possible, the number of people within each community who are benefiting. Please report on the characteristics of the communities, the type of benefits that have been received during the project, and the number of men/boys and women/girls from these communities that have benefited, as a result of CEPF investment. If exact numbers are not known, please provide an estimate.

**18a. Please provide information for all communities that have benefited from project start to project completion.**

Name of Community	Community Characteristics (mark with x)							Type of Benefit (mark with x)							# of Beneficiaries			
	Subsistence economy	Small landowners	Indigenous/ ethnic peoples	Pastoralists / nomadic peoples	Recent migrants	Urban communities	Other*	Increased access to clean water	Increased food security	Increased access to energy	Increased access to public services (e.g. health care, education)	Increased resilience to climate change	Improved land tenure	Improved recognition of traditional knowledge	Improved representation and decision-making in governance forums/structures	Improved access to ecosystem services	# of men and boys benefiting	# of women and girls benefiting

\*If you marked "Other" to describe the community characteristic, please explain:



19b. For each law, policy or regulation listed above, please provide the requested information in accordance with its assigned number.

No.	Country(s)	Date enacted/ amended MM/DD/YYYY	Expected impact	Action that you performed to achieve this change
1				
2				
3				

## 20. Sustainable Financing Mechanism N/A

Sustainable financing mechanisms generate financial resources for the long-term (generally five or more years). Examples of sustainable financial mechanisms include conservation trust funds, debt-for-nature swaps, payment for ecosystem services (PES) schemes, and other revenue, fee or tax schemes that generate long-term funding for conservation.

All CEPF grantees (or sub-grantees) with project activities that pertain to the creation and/or the implementation of a sustainable financing mechanism are requested to provide information on the mechanism and the funds it delivered to conservation projects during the project timeframe, unless another grantee involved with the same mechanism has already been or is expected to be tasked with this.

CEPF requires that all sustainable financing mechanism projects to provide the necessary information at their completion.

### 20a. Details about the mechanism

Fill in this table for as many mechanisms you worked on during your project implementation as needed.

NO.	Name of financing mechanism	Purpose of the mechanism*	Date of Establishment**	Description***	Countries
1					
2					
3					

\*Please provide a succinct description of the mission of the mechanism.

\*\*Please indicate when the sustainable financing mechanism was officially created. If you do not know the exact date, provide a best estimate.

\*\*\*Description, such as trust fund, endowment, PES scheme, incentive scheme, etc.

### 20b. Performance of the mechanism

For each Financing Mechanism listed previously, please provide the requested information in accordance with its assigned number.

NO.	Project intervention*	\$ Amount disbursed to conservation projects**	Period under Review (MM/YYYY -MM/YYYY)***
1			
2			
3			

\*List whether the CEPF grant has helped to create a new mechanism (Created a mechanism) or helped to support an existing mechanism (Supported an existing mechanism) or helped to create and then support a new mechanism (Created and supported a new mechanism).

\*\*Please only indicate the USD amount disbursed to conservation projects during the period of implementation of your project and using, when needed, the exchange rate on the day of your report.

\*\*\*Please indicate the period of implementation of your project or the period considered for the amount you indicated.

Please do not forget to submit any relevant document which could provide justification for the amount you stated above.

**21. Biodiversity-friendly Practices N/A**

Please describe any biodiversity-friendly practices that companies have adopted as a result of CEPF investment. A company is defined as a legal entity made up of an association of people, be they natural, legal, or a mixture of both, for carrying on a commercial or industrial enterprise. While companies take various forms, for the purposes of CEPF, a company is defined as a for-profit business entity. A biodiversity-friendly practice is one that conserves or uses biodiversity sustainably.

**Number of companies that adopt biodiversity-friendly practices**

No.	Name of company	Description of biodiversity-friendly practice adopted during the project
1		
2		
...		

**22. Networks & Partnerships**

Please report on any new networks or partnerships between civil society groups and across to other sectors that you have established or strengthened as a result of CEPF investment. Networks/partnerships should have some lasting benefit beyond immediate project implementation. Informal networks/partnerships are acceptable even if they do not have a Memorandum of Understanding or other type of validation. Examples of networks/partnerships include: an alliance of fisherfolk to promote sustainable fisheries practices, a network of environmental journalists, a partnership between one or more NGOs with one or more private sector partners to improve biodiversity management on private lands, a working group focusing on reptile conservation. Please do not use this tab to list the partners in your project, unless some or all of them are part of such a network / partnership described above.

**Number of networks and/or partnerships created and/or strengthened**

No.	Name of Network	Name of Partnership	Year established	Did your project establish this Network/ Partnership? Y/N	Country(s) covered	Purpose
1	MedPAN		2019	N	All Mediterranean Countries	Promote the establishment, the operation

						and the sustainability of a Mediterranean network of MPAs.
2		Med-Monk seal Project: Enhancing knowledge and awareness on monk seal in the Mediterranean	2021	N	All Mediterranean Countries	A network of actor to promote study and conservation of the monk seal led by SPA/RAC

### 23. GenderN/A

If you have been requested to submit a Gender Tracking Tool (GTT), please follow the instructions provided in the Excel GTT template. If you have not been requested to submit a GTT, please go directly to Part V.

Should you want to know more about CEPF Gender Policy, please click [here](#).

Download the GTT template which can be found on [this page](#) and then work with your team to fill it out. Please do not forget to submit the completed GTT together with this report.

### **Part V. Information Sharing and CEPF Policy**

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned, and results. Final project completion reports are made available on our Web site, [www.cepf.net](http://www.cepf.net), and publicized in our newsletter and other communications.

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