

# PROCEEDINGS

## Mediterranean challenges for Marine Protected Areas and Small Scale Fisheries

& FishMPABlue2 Conference



Organised by:



With the support of:



Project co-financed by the European Regional Development Fund



Editor : MedPAN

Reproduction of this publication for educational or other non-commercial purposes is authorised without prior written permission from the copyright holder provided the source is fully acknowledged.

Reproduction of this publication for resale or other commercial purposes is prohibited without prior written permission of the copyright holder.

Citation : 2018. *Proceedings of the 2018 Regional Experience Sharing Workshop : Mediterranean challenges for Marine Protected Areas and Small Scale Fisheries & FishMPABlue2 Conference*. MedPAN Collection. 62 pp

Copyright: © 2019 - MedPAN

Coordination: P. Vignes, M. Mabari, E. Grimaud, MedPAN

Layout: E. Grimaud, MedPAN

Photos credits : M. Mabari / MedPAN (unless otherwise mentioned)

Available from: [www.medpan.org](http://www.medpan.org)

# Table of contents

<b>The organisers .....</b>	<b>6</b>
<b>FishMPABlue2 project .....</b>	<b>7</b>
<b>MAVA project .....</b>	<b>7</b>
<b>International objectives.....</b>	<b>7</b>
<b>Background on Small Scale Fisheries and Marine Protected Areas .....</b>	<b>8</b>
<b>An experience-sharing workshop for Mediterranean MPA managers .....</b>	<b>10</b>
<b>Summary of recommendations.....</b>	<b>12</b>
<b>Introductory plenary sessions .....</b>	<b>34</b>
<b>Discussion session.....</b>	<b>38</b>
Assessing ecological and socio-economic dimensions of Small Scale Fisheries management in Mediterranean MPAs.....	38
Small Scale Fisheries in Landscape park Strunjan .....	38
Es Freus Marine Reserve: A participatory process as a tool to improve the governance of the protected area.....	39
Lessons learned from the FishMPABlue2 project implementation in a crowded and multi-use MPA: insights from the National Marine Park of Zakynthos .....	40
Recreational fishing in MPAs: is it still a sustainable activity?.....	40
Spatial and temporal dynamics of recreational fishing practices and yields in the Golfe du Lion Marine Natural Park, and management implications.....	41
Presentation of the Methodological guide for the monitoring of fisheries in Mediterranean MPAs .....	41
The management of recreational fishing in the Balearic marine reserves. Development of an application for mobile.....	42
Recreational Fishing in Brijuni National Park.....	42
Invasive species on MPAs: economic and ecological impacts to the artisanal fisheries sector .....	43
Management of the pufferfish <i>Lagocephalus sceleratus</i> in Cyprus and measures taken surrounding the MPA of Cape Greco .....	43
Socio-economic study on the impact of invasive species in Lebanese MPAs .....	43
Marine protected areas and aquaculture : addressing the question marks .....	44
Mediterranean MPAs and aquaculture: elements for a regional approach.....	45
Marine sea cage production systems presence close to the MPA of Karaburun-Sazani .....	45
The FishMPABlue2 approach towards the co-management of SSF in MPAs .....	46
Developing cooperation with small scale fishers to reducing the fishing effort - The experience of Marine Protected Area of Torre Guaceto .....	46
Co-management of Small Scale Fisheries in Telašćica MPA .....	46
Co-management of Small Scale Fisheries in MPAs: constraints, synergies and opportunities .....	48
Community-based management in Pantelleria: A local community response to a Mediterranean-wide crisis	48
AMP Isola dei Ciclopi Acicastello, Italy .....	49

Community-based management of Small Scale Fisheries in MPAs .....	50
Community-based management of SSF in Gökova .....	50
Mainstreaming the recovery of marine fisheries and ecosystems inside and outside MPAs through collective action and citizen science .....	51
First initiative of associations for the creation of a Marine Protected Area in Collo, Algeria .....	51
Legal frameworks for the management of fishing activities in MPAs .....	53
Cabrera National Park Fisheries Management Plan .....	53
Artisanal fishing as a tool for protecting fish stocks in MPAs and neighbouring areas: Algerian legal framework and objectives .....	53
Specific fishing regulations in Croatia: the case of Kornati National Park and Telašćica Nature Park .....	54
Proposal of governance model for management of small scale fisheries in MPAs .....	55
The Côte Bleue Marine Park: a success story in co-construction and partnership with Small Scale Fisheries for 35 years .....	55
The Cap Roux fishing reserve: a Marine Protected Area created and managed directly by fishers .....	55
Legal framework for management of fishing activities in Natura 2000 sites.....	57
Taking into account professional fishing activities in Natura 2000 sites .....	57
The new legal framework (2018) for Greek MPAs and its consequences on managing fisheries in Natura 2000 marine sites .....	58
Measures implemented in the Menorca Channel concerning small-scale fisheries .....	58
DACOR Project (CORses hAlieutic data) Measure 28 of the EMFF (April 2017-March 2020).....	58
Anti-poaching strategies for Marine Protected Areas .....	60
From MedPAN Project to StaMM: 4 years of monitoring, control and prevention of illegal fishing in the Gaiola Underwater Park .....	60
Shared territorial management: a key success factor in the fight against illegal fishing in the Calanques national Park .....	60
Towards 2% of no-take zones in the Mediterranean: acting at the different levels.....	62
Can a seasonal no-take zone provide effective protection of fish fauna within an MPA? .....	62
Spanish Mediterranean marine reserves - Islas Columbretes Marine Reserve case study .....	62
Consolidation and expansion of No Fishing Zones in Turkey .....	63
Challenges and solutions for the eco-labelling of small-scale fisheries in the Mediterranean .....	64
Medfish Project: A multi-fishery and participatory approach to move towards sustainable Mediterranean fisheries .....	64
The artisanal octopus pot fishery in the west of Asturias: An experience of MSC certification on a small-scale fishery .....	65
Club Bleu Artisanal: Appropriate procedures and digital technology for the labelling of Small Scale Fishery products.....	65
The Charfia, a fixed fishery typical of the Kerkennah Islands.....	65
Fishermen of yesterday, today, tomorrow: the recent history of the Lagoon of Orbetello .....	66
Principles for a Sustainable Pescatourism .....	67
Revolution: fishing tourism .....	67
Jump starting fishing tourism in Croatia – From no interest to adoption in 3 years .....	68
The experience of guided tours to the Tonnarella of Camogli and the fishing tourism in Portofino MPA ...	68

Pescatourism between the challenge of the tourist service and the socio-economic perspective of fishing in Algeria .....	68
MPAs and artificial reefs, complementary management tools?.....	69
Côte Bleue Marine Park: artificial reefs and protected reserves at the heart of management for 35 years	70
Life Reef technologies project in Port de la Selva (Cap de Creus, Spain) .....	70
Assessment of 30 years of artificial reef immersions on the Agathoise coast (Agde, Hérault).....	70
National networks: an added value for the management of small scale fisheries in and around MPAs:	
Spain's Network of Marine Reserves and other MPAs in the Mediterranean .....	72
Spain's Network of Marine Reserves .....	72
The Spanish National Par Network: its role and the Mediterranean marine nodes .....	73
Regional networks of MPA managers. An added value for the management of small scale fisheries.....	73
The EU Transatlantic project: "Towards a transatlantic partnership of MPAs" .....	74
Sustainable financing of MPAs.....	76
International Sources of Funding for MPA Management (CFA) .....	76
Association for the sustainable Financing of Mediterranean MPAs .....	77
Marilles Foundation .....	77
<b>Closing session.....</b>	<b>78</b>
<b>Field trip to Cabrera national Park.....</b>	<b>80</b>
<b>Appendix 1 - Participant List .....</b>	<b>82</b>
<b>Appendix 2 - Programme overview .....</b>	<b>88</b>
<b>Appendix 3 - Programme development process .....</b>	<b>90</b>
<b>Appendix 4 - Satisfaction survey.....</b>	<b>91</b>

# The organisers



MedPAN is the network of Marine Protected Areas managers in the Mediterranean. It gathers today over 100 institutions and NGOs that either have direct responsibility for managing Marine Protected Areas (MPA) or are involved in the development of MPAs in the Mediterranean. These players manage over 100 MPAS in 19 Mediterranean countries. The MedPAN network's mission is to promote, through a partnership approach, the sustainability and operation of a network of Marine Protected Areas in the Mediterranean which are ecologically representative, connected and effectively managed to help reduce the current rate of marine biodiversity loss. [www.medpan.org](http://www.medpan.org)



The *Ministerio de Agricultura, Pesca y Alimentación* is responsible for proposing and implementing the Government's policy on agricultural, livestock and fishery resources, rural development and food industry. [www.mapa.gob.es/es/](http://www.mapa.gob.es/es/)



20  
AÑOS

The *Ministerio para la Transición Ecológica* is responsible for proposing and implementing the Government's policy on energy and environment for the transition to a sustainable development towards a more ecological productive and social model. The Ministry is coordinating the LIFE integrated project INTEMARES through the Biodiversity Foundation. [www.miteco.gob.es](http://www.miteco.gob.es) - [www.fundacion-biodiversidad.es](http://www.fundacion-biodiversidad.es)

ORGANISMO  
AUTÓNOMO  
PARQUES  
NACIONALES

INTEMARES



Organismo Autónomo Parques Nacionales <https://www.miteco.gob.es/es/parques-nacionales-oapn/>

LIFE IP INTEMARES «Integrated, innovative and participatory management of the Natura 2000 Network in the Spanish marine environment» is the largest marine conservation project in Europe. It is the first initiative at national level combining different European funds for the management of an entire network of protected areas, including the European Maritime and Fisheries Fund and the European Social Fund. Its main objective is to achieve a consolidated network of Natura 2000 marine areas, managed in an efficient and integrated manner, with the active participation of the sectors involved and with research as basic tool for decision making. The project promotes innovative approaches in relation to the marine Natura 2000 network, in order to become reference areas for a new production model within the framework of a more sustainable and low carbon economy, involving socio-economic sectors and users of the sea in the management of these sites. <http://www.intemares.es/>



# FishMPABlue2 project



The FishMPABlue2 project aims to test a set of governance measures identified as key factors for the successful management of small scale fisheries within and around MPAs ('Governance toolkit') and to assess its ecological, economic and social impact. This 'Governance toolkit' is currently tested in 11 pilot sites. The FishMPABlue2 "Sustainable Small Scale Fishery in MPAs sharing-experience" Regional Conference is actually embedded within the MedPAN workshop, with an overall presentation in the joint session and with targeted presentations in the different breakout sessions.

<https://fishmpablue-2.interreg-med.eu/>

## MAVA project

The objectives of the MAVA fisheries action plans of their Mediterranean programme will also be weaved in the programme of the MedPAN workshop. Within these action plans, the foundation, in cooperation with partners on the ground and thought leaders on sustainable economy and conservation science, is seeking to make fishing more sustainable by limiting impacts on priority species and habitats, and reducing fishing pressure on high trophic level fish species.

<http://mava-foundation.org/fr/programmes-2/>

## International objectives

The discussions and outcomes of the experience exchange workshop will take place bearing in mind the engagements of Mediterranean countries to achieve the targets of the Convention on Biological Diversity by 2020, and more specifically target 11 on the coverage and management of MPAs and target 6 on the sustainable harvesting of fish and invertebrate species as well as Sustainable Development Goal 14 of the United Nations to conserve and sustainably use the oceans, seas and marine resources for sustainable development.



© Cabrera National Park

## Background on Small Scale Fisheries and Marine Protected Areas

Small-scale fishing is a pillar of Mediterranean culture. Today it represents 83% of the fishing boats in the Mediterranean and Black Sea and 57% of the direct employment in the fishing sector (150,000 fishermen and an important related economic activity) but only generate 14% of catches for 20% of their value (source: FAO-CGPM).

Small-scale fishers are directly dependent on the health of marine ecosystems and the abundance of the species they target. Their fishing strategies, coastal and on a limited radius from the home harbours for the most part, aim to alternate zones and selective fishing gear in order to target various species according to the seasons. So when practiced with adaptability in terms of gears and species targeted, with reason (before stocks show signs of exhaustion) as well as with respect for the rules established, Small-Scale Fishing can be much less impacting on the resource than other types of fishing. But today maintaining this activity is hindered by the collapse of the resource that is noted on all levels.

MPAs are increasingly used as one of the tools for Small-Scale Fisheries management. Indeed,



their main objective is the protection of biodiversity and ecosystems, and their effects on the regeneration of the resource can directly benefit fishermen. Because of its scale and its practices, small-scale fishing can be compatible with the sustainable use of coastal resources and thus fishermen and MPA managers have come closer together.

A number of meetings and projects focusing on Small-Scale Fisheries have taken place in recent years. Many recommendations resulted from these, including the possible compatibility of Small-Scale Fisheries with marine conservation objectives and how to achieve a better management of the marine environment and the regeneration of the resource.

This process culminated in September 2018 with the FAO-CFCM high-level conference on sustainable Small Scale Fisheries in the Mediterranean and the Black Sea and the signing of ministerial declaration of the Regional Plan of Action for Small-Scale Fisheries in the Mediterranean and the Black Sea. A set of recommendations elaborated during an exchange in Jijel, Algeria, earlier this year between fishers and Mediterranean MPA managers was fed back to the FAO-GFCM to contribute to the elaboration of this document.

Among the most important concerns voiced by fishers and MPA managers figure: the set-up of a participatory approach engaging the Small-Scale Fisheries sector in the management, the implementation of effective no-take zones which allow the regeneration of the resource with tangible results for the fishers, monitoring and adaptive management involving fishers and their traditional knowledge, improved surveillance, illegal fishing elimination, small-scale fisheries product valuation, support for alternative activities... These are some of the theme that will be addressed during the workshop.



**The agenda of the MedPAN workshop and the sessions format are built around the following objectives:**

- **Provide a regional overview of the strategies, policies, projects and programmes related to Small Scale Fisheries and MPAs in the Mediterranean and share views and ideas on how the MedPAN network can effectively influence policies (European, Mediterranean, International);**
- **Help MPAs and local fishing communities identify best practices and solutions to problems they encounter for a successful governance and management of Small Scale Fisheries;**
- **More specifically, a FishMPABlue2 project regional conference will focus on the outcomes coming from the implementation of measures taken from the Small Scale Fisheries 'Governance toolkit' in the 11 pilot sites.**



# An experience-sharing workshop for Mediterranean MPA managers

The 2018 MedPAN Network regional experience-sharing workshop focused on the “Mediterranean challenges for Marine Protected Areas and Small Scale Fisheries”. The workshop was held on 13-15 November 2018 in the Balearic islands in Palma de Mallorca, Spain, in association with several partners and pilot sites within the framework of the large Mediterranean programme of the MAVA foundation and Interreg Med FishMPABlue2 project.

This three-day event was embedded with the conference of the Interreg Med FishMPABlue2 project. The two meetings were also held in conjunction with the Second marine Natura 2000 seminar happening simultaneously in the same venue in Palma de Mallorca. A joint opening session was held with the aim of fostering synergies between the various formats of exchanges.

The overall purpose of the MedPAN workshop was to allow MPA managers, fishers and related stakeholders to pool and share information, expertise and experiences and take stock on the current challenges for MPAs and Small Scale Fisheries in the Mediterranean. The workshop thus provides an opportunity for MPA managers, project leaders, and stakeholders to meet, discover initiatives, be inspired and build long-term approaches to implement

solutions together.

More specifically the objectives of this year workshop were to:

- Help MPAs and local fishing communities identify best practices and solution for a successful governance and management of small scale fisheries;
- Share views and ideas on how the MedPAN network can effectively influence policies (European, Mediterranean, International);
- Share the outcomes related to the implementation of measures taken from the FishMPABlue2 ‘Governance toolkit’ in the 11 pilot sites of the project.


The workshop brought together nearly 180 marine actors from 22 Mediterranean countries and beyond, mainly MPA managers, fishermen and their representatives as well as NGOs (see participants list in annex).

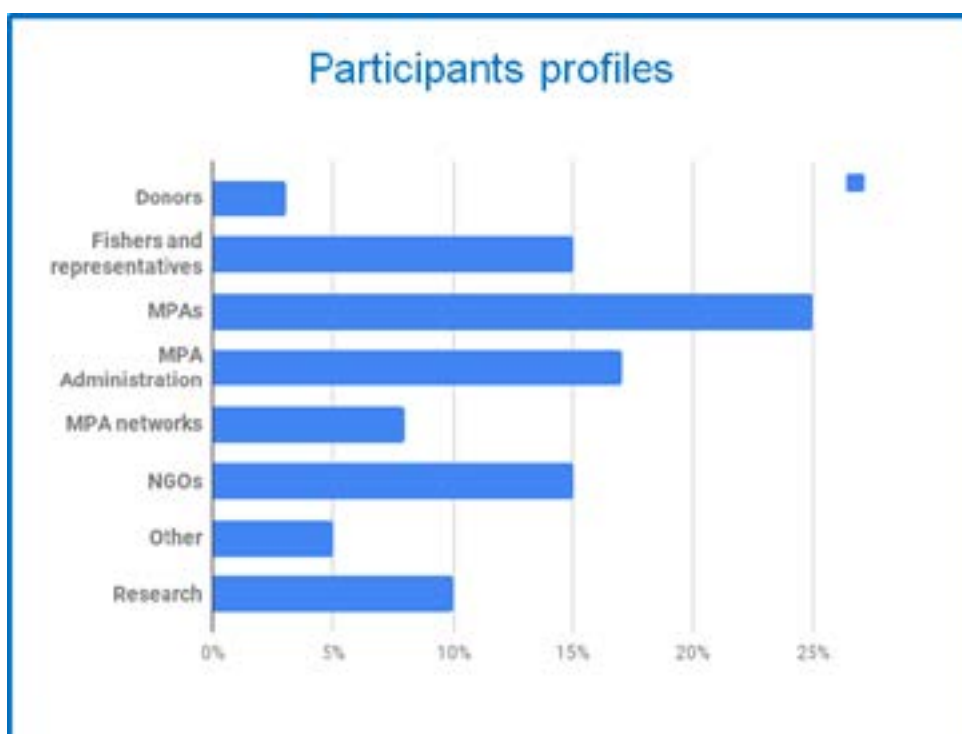
Eighteen discussion sessions, each introduced by 2 or 3 case studies spread over 2 days of workshops (48 MPA case studies showcased), allowed participants to discuss common issues of governance and management of small scale fisheries: legal frameworks, regulation and control, combating poaching and





illegal resale of recreational fishing catches, co-management and community approaches, economic sustainability, eco-labelling, Pes-catourism, artificial reefs, invasive species, aquaculture. Cross-cutting topics were also discussed during this workshop, such as the sustainable financing of MPAs and the added value of national and regional networks for the management of fisheries activities in MPAs.

 You can see participant profiles below and take a look at the participant list in the [«Appendix 1 - Participants List», page 82.](#)

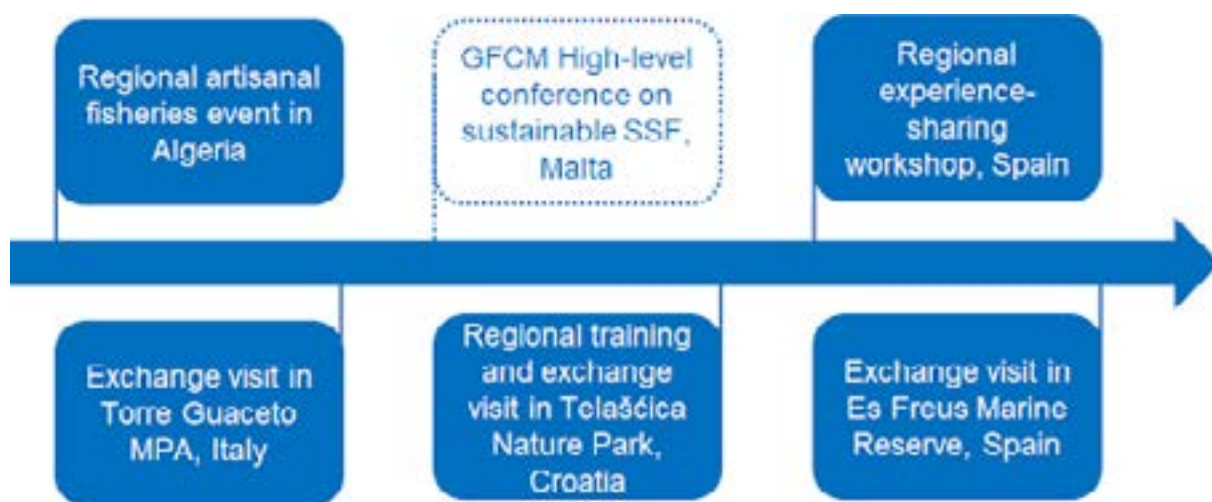




## Summary of recommendations



The MedPAN Network regional experience-sharing workshop was drawn in the continuity of several other activities undertaken in 2018 by MedPAN and its partners on small-scale fisheries and MPAs, and of a number of meetings and projects on small-scale fisheries that took place over the last years.



The conclusions and recommendations of MedPAN Regional experience sharing workshop that are summarised in this section integrate those of these network's other experience sharing activities this year, as well as some results and inputs from the survey on fishing activities in MPAs that was conducted by MedPAN in 2018 (80 responses from 17 countries).

These conclusions and recommendations revolve around the five main thematic axes of the discussions sessions:

## **1. Knowledge and monitoring of fishing activities in and around MPAs**

## **2. Stakeholders' engagement and participation in the fisheries management decision-making process**

## **3. Legal frameworks, regulation and control of fishing activities**

## **4. Economic sustainability of small-scale fisheries**

## **5. The added value of MPA networks**



**You will find useful resources for fisheries management in MPAs on MedPAN website at the following address:** <http://medpan.org/marine-protected-areas/themes-2/sustainable-fishing/>





# 1. Knowledge and monitoring of fishing activities in and around MPAs

It is essential to establish an ecological and socio-economic baseline when creating an MPA and to carry out an ongoing assessment to measure concrete results (spillover in particular) and adapt management and regulation in order to ensure biodiversity conservation and maintain sustainable fishing activity. This requires a systemic approach considering fishing activities inside and outside the MPA.

## ENSURING THE COLLECTION OF SOUND ECOLOGICAL AND SOCIO-ECONOMIC DATA ON SMALL SCALE AND RECREATIONAL FISHERIES

The answers provided by MPA managers to the questionnaire circulated by MedPAN in 2018 (80 answered questionnaires from 17 countries), show that a majority of MPAs (58%) are implementing studies or monitoring protocols dedicated to professional fishing activities, whilst recreational fishing activities are documented for only 38% of them. This gap in knowledge should be addressed, as many managers (supported by the results of some studies) perceive that recreational fishing catches are sometimes equivalent in quantity to catches from small scale fisheries. It is thus also important to monitor the recreational fishing activity in order to target appropriate measures and regulation.

The designation of recreational fishing areas may facilitate the study of its direct impact independently from professional fishing, and thus allow for the adaptation of recreational fishing regulation accordingly.

**Study or monitoring protocol implemented in Mediterranean MPAs**

*source: MedPAN study 2018*



## IMPROVING KNOWLEDGE ON HABITATS AND FISHING EFFORT

Overall, it appears that very few MPAs have data on fishing effort (CPUE to be measured in areas of different protection status) and that comprehensive and solid data on habitat mapping are also often lacking. These data, however, are necessary in order to identify effective area-based management strategies (benefit of no-take zones in particular) and thus change regulation and adapt if necessary (e.g. change the perimeter of a no-take zone, prohibit certain gears on habitats that they can damage).

## INVOLVING FISHERS IN SCIENTIFIC MONITORING ACTIVITIES AND VALUING FISHER'S TRADITIONAL KNOWLEDGE.

One of the recurring recommendations resulting from the exchange organised this year concerns the involvement of fishers in scientific monitoring activities, which is crucial to benefit from their empirical knowledge of species life cycle. Conditions to the engagement of fishers are to build trust between MPA managers and fishers, to base on clear agreements, provide regular feedback on the results of monitoring to the fishing community, and to compensate their contribution to the monitoring activities. Fishers also need to be trained for the collection of data, as well as scientists and managers to integrate the fishers' traditional ecological knowledge.

## INCREASING KNOWLEDGE AND MONITORING OF INVASIVE FISH SPECIES.

More data is needed to increase knowledge on invasive species and assess their ecological impacts and their implications to the fishery sector, as well as to take action accordingly. In particular, monitoring is needed to:

- » (1) build knowledge about these species life cycle (reproduction, feeding areas, etc)
- » (2) assess the impact of NIS on fisheries communities in MPAs
- » (3) record changes in native species populations.

Based on these data, MPAs will be able to raise awareness of the local communities on the invasive species and those that are expected to come, as well as to promote the role of MPAs and their good conservation status to mitigate the expansion of invasive species.



M. Mabari / MedPAN

- › **Disseminate cost-effective monitoring protocols and methodologies, including the FishMPABlue2 methodology.** MedPAN Methodological guide for the monitoring of fisheries in Mediterranean MPAs, which is currently being finalised, will be circulated in 2019.
- › **Contribute to fill gaps in knowledge on habitat mapping in Mediterranean MPAs:** as part of the MAVA Foundation funded project on fisheries in the Mediterranean Sea, MedPAN is currently collecting all the available existing habitat mapping with their metadata information on the quality, scale, coverage etc.; the collected data could be included in the future in the MedPAN database. This provision of knowledge will contribute to the establishment of better and more appropriate area-based conservation measures. It will also facilitate the cooperation between MPA managers with similar challenges. MedPAN is supporting small projects to work on habitat mapping in some MPAs.
- › **Contribute to fill gaps in knowledge on ecological and socio-economic baseline data (including data on recreational fisheries).** In 2019, as part of the MAVA Foundation funded project on fisheries in the Mediterranean Sea, MedPAN will conduct data collection campaigns in 4 Mediterranean MPAs where this information is not yet or partially available.
- › **Contribute to fill gaps in knowledge for the characterization of fisheries in Mediterranean MPAs:** still part of the MAVA project, MedPAN will collect data on both professional and recreational fisheries (including traditional knowledge).
- › **Develop and implement specific training modules with a strong operational focus on habitat mapping and monitoring fishing effort as** part of MedPAN regular training programme. One of the components of these trainings should be to build the capacity of scientists and managers to integrate fishers' traditional ecological knowledge, as well as to train fishers for data collection.
- › **Raise awareness and implement training for fishers and fisheries authorities about responses to environmental challenges** (especially climate change and invasive species).
- › **Identify and share tools to facilitate the monitoring of recreational fishing activities in MPAs** (e.g. disseminate solution such as the mobile app currently developed in Spanish Marine Reserves).
- › **Organise an experience-sharing workshop** on recreational fisheries monitoring and management in MPAs (or a regional training workshop).
- › **Promote the importance of having an MPA effectiveness assessment system at European or regional level (supranational)** that ensures the effectiveness of MPAs in each country and promotes the necessary changes in their management for them to be functional.
- › **Promote existing initiatives and tools such as the IUCN [Strategy for Marine Alien Invasive Species in Marine Protected Areas](#) and [MedMIS platform](#)** to better address and keep track of invasive alien species in MPAs.



## 2. Stakeholders' engagement and participation in the fisheries management decision-making process

To be effective, MPAs should have a governance system that involves fishers and other stakeholders in their management committee for active participation in joint decision-making (co-management structure) and co-design of management measures. Indeed, regulatory measures developed with a participatory approach engaging the small-scale fisheries sector will help find the best compromise regarding the choice of areas to be protected and the management measures to be adopted. Fishers should therefore be given an active role, responsibility and power in the creation and management of MPAs and their knowledge taken into account when establishing zoning, management measures and control. To be successful, fishermen's involvement in co-management should be based on Elinor Ostrom's 8 principles for how commons can be governed sustainably and equitably in a community.

### Elinor Ostrom's 8 rules for managing the commons



The commons are those [things that we all own together](#), that are neither privately owned, nor managed by the government on our behalf. Some are large scale and somewhat abstract, such as the English language. Others are local and more tangible, such as fishing rights, and they need more careful management. Our current political paradigm is sceptical of the commons: if nobody takes responsibility for something, it will inevitably be abused. So either it needs to be in private hands, or run by public institutions.



There are good examples of commons though – irrigation networks or pastures that have been managed by and for ordinary people for generations, and they're still functioning. There are also examples of wrecked pastures and over-exploited fishing grounds, failed commons where a resource was mismanaged and destroyed. [Elinor Ostrom](#) studied both kinds, and drew up a list of principles for running the commons. I read them recently in [Derek Wall's book on her work](#), and they're worth sharing.

- 1. Commons need to have clearly defined boundaries.** In particular, who is entitled to access to what? Unless there's a specified community of benefit, it becomes a free for all, and that's not how commons work.
- 2. Rules should fit local circumstances.** There is no one-size-fits-all approach to common resource management. Rules should be dictated by local people and local ecological needs.
- 3. Participatory decision-making is vital.** There are all kinds of ways to make it happen, but people will be more likely to follow the rules if they had a hand in writing them. Involve as many people as possible in decision-making.





4. **Commons must be monitored.** Once rules have been set, communities need a way of checking that people are keeping them. Commons don't run on good will, but on accountability.
5. **Sanctions for those who abuse the commons should be graduated.** Ostrom observed that the commons that worked best didn't just ban people who broke the rules. That tended to create resentment. Instead, they had systems of warnings and fines, as well as informal reputational consequences in the community.
6. **Conflict resolution should be easily accessible.** When issues come up, resolving them should be informal, cheap and straightforward. That means that anyone can take their problems for mediation, and nobody is shut out. Problems are solved rather than ignoring them because nobody wants to pay legal fees.
7. **Commons need the right to organise.** Your commons rules won't count for anything if a higher local authority doesn't recognise them as legitimate.
8. **Commons work best when nested within larger networks.** Some things can be managed locally, but some might need wider regional cooperation – for example an irrigation network might depend on a river that others also draw on upstream.

The 'tragedy of the commons' is real, but it is not inevitable. It is possible to create and operate thriving commons, a third way besides private ownership and government control. In an age where we all depend on global commons such as the atmosphere or the oceans, we should be paying more attention to commons management.



**Source: Jeremy Williams - <https://makewealthhistory.org>**





## MPA key stakeholders to involve to achieve the goals of the MPA related to the management of fishing activities

Fishers and fisheries organisations	95%
Coast guard and other police authorities	88%
Ministries and national agencies	86%
Scientific organisations	86%
Municipality and other local government	81%
Regulatory authorities	47%
NGOs	44%
Other users groups	42%
Prosecutor and other judicial authorities	35%

source: MedPAN study 2018

### BUILD TRUST

One of the recurring recommendations resulting from the exchange organised this year concerns the involvement of fishers in scientific monitoring activities, which is crucial to benefit from their empirical knowledge of species life cycle. Conditions to the engagement of fishers are to build trust between MPA managers and fishers, to base on clear agreements, provide regular feedback on the results of monitoring to the fishing community, and to compensate their contribution to the monitoring activities. Fishers also need to be trained for the collection of data, as well as scientists and managers to integrate the fishers' traditional ecological knowledge.

### BUILD RELATIONSHIPS ON CLEAR AGREEMENTS

It is also important to base these relationships on clear agreements: these can be informal at the beginning (when starting engagement), but then they need to be formalized and the roles of the two parts need to be stated clearly. Engagement can be started communicating with "key" fishers (the more receptive), who will help convincing other fishers in the community that working with MPA managers can lead to a win-win situation. Working together in the resolution of problems raised by the fishing community will help strengthening the mutual trust and relationship within community members and with authorities.

### PROMOTE THE CREATION OF FISHERS ASSOCIATIONS AND COOPERATIVES

Promoting the creation of fishers associations and cooperatives (e.g. Spanish cofradías) will facilitate discussion on common issues and solutions and will improve the management of marine resources as well as interactions with the MPA. MPAs can thus stimulate the social organisation of fishers. This can be a first step towards co-management.

### ENSURE THE RECOGNITION AND PARTICIPATION OF WOMEN IN THE MANAGEMENT AND DECISION MAKING PROCESS

It is also important to base these relationships on clear agreements: these can be informal at the beginning (when starting engagement), but then they need to be formalized and the roles of the

two parts need to be stated clearly. Engagement can be started communicating with “key” fishers (the more receptive), who will help convincing other fishers in the community that working with MPA managers can lead to a win-win situation. Working together in the resolution of problems raised by the fishing community will help strengthening the mutual trust and relationship within community members and with authorities.

## **PROVIDE CONCRETE BENEFITS TO FISHERS FOR THEIR AVAILABILITY AND PARTICIPATION**

From the beginning of the process, it is also crucial to take into account fishers’ interest in income and to provide some concrete benefits to fishers for their availability and participation (e.g. new nets, ice machines etc.). The development of fishing tourism has also proved to be a good tool to build closer relationship with local fishers, start co-management and help achieve MPA compliance.

## **PROMOTE THE CREATION OF FISHERS ASSOCIATIONS AND COOPERATIVES**

Promoting the creation of fishers associations and cooperatives (e.g. Spanish *cofradias*) will facilitate discussion on common issues and solutions and will improve the management of marine resources as well as interactions with the MPA. MPAs can thus stimulate the social organisation of fishers. This can be a first step towards co-management.

## **ENSURE THE RECOGNITION AND PARTICIPATION OF WOMEN IN THE MANAGEMENT AND DECISION MAKING PROCESS**

Community-based approaches should also take into account the high contribution of women in the small scale fisheries (i.e. due to their involvement in pre-harvest and post –harvest, women represent a 50% of the fisheries). It is therefore essential to ensure that women are further recognised by the promotion of gender inclusive leaderships and legal framework, and that they are included in the management and decision making process.

## **PROVIDE CONCRETE BENEFITS TO FISHERS FOR THEIR AVAILABILITY AND PARTICIPATION**

From the beginning of the process, it is also crucial to take into account fishers’ interest in income and to provide some concrete benefits to fishers for their availability and participation (e.g. new nets, ice machines etc.). The development of fishing tourism has also proved to be a good tool to build closer relationship with local fishers, start co-management and help achieve MPA compliance.

## **ASSESS THE REAL INVOLVEMENT OF SMALL SCALE FISHERIES IN CO-MANAGEMENT**

From the beginning of the process, it is also crucial to take into account fishers’ interest in income and to provide some concrete benefits to fishers for their availability and participation (e.g. new nets, ice machines etc.). The development of fishing tourism has also proved to be a good tool to build closer relationship with local fishers, start co-management and help achieve MPA compliance.

## PROVIDE FISHERS WITH TRAINING

The lack of facilitating processes and time prevents fisherman from benefiting from training courses, since they have no way of accessing them.

## ENSURE AN ACCEPTABLE LEVEL OF CONTROL OF THE TERRITORY

Last but not least, a basic prerequisite for engaging the fishers in MPA management is that the MPA can ensure an acceptable level of control of the territory. Fishers will expect the MPA to contribute effectively to the enforcement and rationalization of the fishing area. The MPA must therefore have a specific strategy and actual tools for supporting local small scale fisheries, in relation to other uses and “competitive” actors (industrial and recreational fishery, tourism, etc.) and to illegal fishing practices (trawling in the coastal zone, poaching, illegal sale of catches...).

### Opportunities at network level

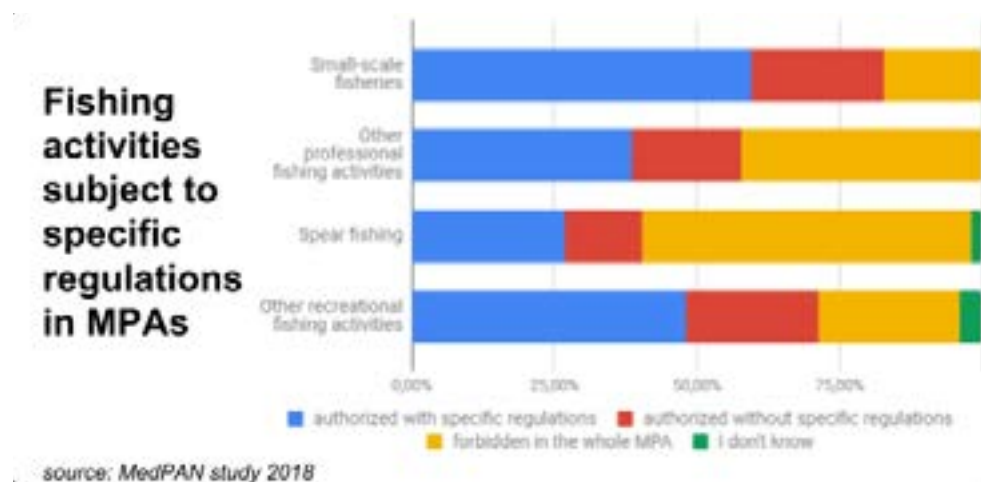
---

- › **Advocate at the national levels the need for administrations to adopt co-management model for small scale fisheries in MPAs.** Within the MedPAN new strategy, support at national level could be done through ad’hoc advocacy and communication tools, developed by MedPAN, and used by MPA managers to communicate at national level. Sub-regional and national networks of MPA managers have also an important role to play.
- › **Implement information campaigns at national level to promote MPAs as an effective tool for small scale fisheries management.** Within the MedPAN new strategy, support at national level could be done through ad’hoc advocacy and communication tools, developed by MedPAN, and used by MPA managers to communicate at national level. Sub-regional and national networks of MPA managers have also an important role to play.
- › **Promote the FishMPABlue2 governance model and ‘toolkit’ approach:** as a first step in 2019, MedPAN and its partners will identify at least 5 additional MPAs (besides the project pilot sites) to commit to the FishMPABlue2 approach.
- › **Organise field exchange visits with fishers, fisheries administrations, and MPA managers to allow peer-to-peer exchanges from the observation of successful case studies.** Exchange visits should focus on bottom-up co-management experiences in local fishing communities structured as cooperatives or associations, where fisheries regulations and well enforced no-fishing zones have yielded tangible results for the benefit of both conservation and fisheries. Within the MedPAN new strategy, exchange visits will be organized to support this approach. Within the COGITO project, WWF, MedPAN, Conservatoire du Littoral and PIM association will organize trainings using this approach.
- › **Develop and implement specific training modules for managers and fishers on the co-management of small scale fisheries in MPAs.** Within the MAVA project on fisheries, MedPAN will develop in 2019 specific modules within its operational and permanent training mechanism.
- › **Enhance collaborations between MedPAN and FARNET (the European Fisheries Areas Network) to raise awareness of the possible role of FLAGS** to facilitate interactions between MPAs and stakeholders (including SSF) and the involvement of small scale fisheries in the MPA governance (from setting up to management)
- › **Enhance collaborations between MedPAN and platforms of small scale fishers** (LIFE - Low Impact Fishers of Europe, Plateforme maghrébine de la pêche artisanale) to facilitate interactions between MPAs and SSF and the involvement of small scale fisheries in the MPA governance (from setting up to management).

### 3. Legal frameworks, regulation and control of fishing activities

The regulation and control of fishing activities is at the top of the MPAs fisheries management priorities.

This is evidenced by the results of the study conducted by MedPAN in 2018 (80 responses from 17 countries), as 75% of the MPAs answered it is a high priority and 20% a medium priority. This concern has also been regularly raised during exchanges between MPA managers and small scale fishers, both of which point to the lack of effective control and enforcement, and to some extent also inadequate legal frameworks.

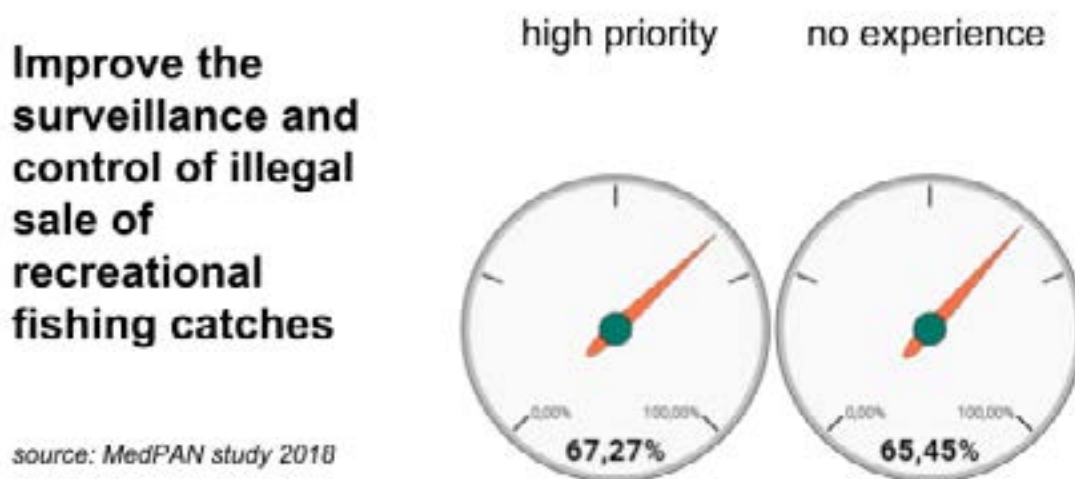


## OVERCOMING CONFLICTS OF COMPETENCE BY MAKING FISHERS THE SPOKESPERSONS OF THE MPA TO THE INSTITUTION

Many MPAs do not have specific fisheries regulations, whilst regulations outside the MPA are made by authorities that do not have competences inside. Often, there is a conflict of competences between the Ministry of Agriculture/Fisheries and the Ministry of Environment. Such conflicts may be overcome by empowering fishers to be the voice of the MPA to the concerned institutions. This requires that fishers be involved in the co-management of the MPA.

## COMBATING POACHING AND THE ILLEGAL RESALE OF RECREATIONAL FISHING CATCHES

At the top of the list, the problem of the illegal resale of recreational fishing catches is mentioned repeatedly by both managers and fishers. Basing on the results of the aforementioned study, improving the surveillance and control of illegal sale of recreational fishing catches is considered a high priority by 67% MPAs and a medium priority by 25%. Meanwhile, 65% of the MPAs indicate that they have no experience in this field and are therefore powerless to deal with this problem.



It is important to recall here that, in addition to the ecological damage, the illegal resale of recreational fishing catches jeopardizes the already fragile economy of small scale fisheries. As said before, a basic prerequisite for engaging the fishers in MPA management is that the MPA can assure an acceptable level of control of the territory.

Indeed, the creation of a no-take zone is perceived by fishermen as a sacrifice of part of their fishing ground. If the no take zone is not properly enforced, the expected spillover effect will be hampered by illegal fishing activities. Fishers will therefore not see the expected benefits in return for the sacrifice they made, and the MPA will be discredited. Worse still, if illegal fishing activities persist in the no-take zone or despite regulatory provisions, those who comply with the rule today will eventually violate it tomorrow.

It is therefore critical to provide MPAs with strategies and tools, as well as with the necessary legal competences and means to curb this problem which seems to be widespread in the Mediterranean. Of course, poaching is not always motivated by economic interest and all illegal fishing activities must be addressed.



<b>Priority actions and experience</b>	<i>Priority level</i>			<i>Experience</i>	
	not a priority or low	medium	high	no experience	some actions already implemented
Clarify the governance structures (i.e. roles and responsibilities of different authorities and organizations)	27,27%	27,27%	45,45%	32,73%	67,27%
Set limits and quota for fishing licenses (all types) in order to reduce fishing effort inside the MPA	27,27%	21,82%	50,91%	41,82%	58,18%
Establish territorial rights to safeguard the fishing efforts of local fishers and limit the entrance of new fishers	25,45%	36,36%	38,18%	60,00%	40,00%
Increase the time and perimeter of surveillance in the MPA	7,27%	29,09%	63,64%	20,00%	80,00%
Involve the local fishers in the surveillance activities	16,36%	29,09%	54,55%	54,55%	45,45%
Improve the surveillance and control of illegal trawling in coastal waters	25,45%	25,45%	49,09%	43,64%	56,36%
Improve the surveillance and control of illegal sale of recreational fishing catches	7,27%	25,45%	67,27%	65,45%	34,55%
Effectively address poaching and destructive practices affecting marine ecosystems (e.g. dynamite)	14,55%	21,82%	63,64%	47,27%	52,73
Develop specific regulations to support inter-sectoral income-generating activities (e.g. pesca-tourism)	12,73%	38,18%	49,09%	60,00%	40,00%
Foster the coordination of national and regional legislation on conservation, fishery and tourism	10,31%	29,09%	60,00%	49,09%	50,91%

source: MedPAN study 2018

## EMPOWERING MPA RANGERS WITH POLICE CAPACITY AND ENHANCING COORDINATION BETWEEN AUTHORITIES, ADMINISTRATIONS AND LOCAL STAKEHOLDERS

MPAs almost unanimously underline the critical importance of empowering MPA rangers with police competencies to allow them impose fines on offenders. This legal competence is considered essential in order not to depend solely on external authorities and to allow a rapid and effective response to offences detected during patrols.

But in any case, effective coordination making the most of the complementarity of the MPA rangers and other authorities legal competences is key to a successful enforcement of regulation, especially for addressing the most serious offences.

The coordination of all competent administrations (environment, fisheries), police and judicial authorities and stakeholders (including diving clubs, fishers as long as the anonymousness of their information is assured...) should allow to cover the entire chain of violations (from when the fish is caught to when it's sold) and consider all the protagonists (accomplice) involved in the illegal activities and benefitting from them (restaurants, fishmongers...).

The prosecutor is one of the key players in this coordination. However, environmental offences are not always the priority of prosecutors, either because they have to deal with serious criminal cases (murder, narcotics and arms trafficking...), or because they are not familiar with environmental legislation and are thus reluctant to engage in this field. MPAs should therefore try to raise awareness on environmental offences among prosecutors in order to get them actively involved in the set up of a criminal strategy to ensure effective, proportionate and timely response to illegal fishing activities and environmental offenses (depending on the seriousness of the offense).

In particular, the criminal strategy should provide for sufficiently dissuasive sanctions and fines. It should be kept in mind that poachers think like businessmen and will not be discouraged from continuing their activity if the expected income remains higher than the risk. In the case of the most serious offences, a challenge for MPAs will be to characterise and calculate the cost of ecological damage.

As a disincentive, it is also strongly recommended to communicate and give visibility to the most emblematic successful police and judicial operations in the media.

## **OPTIMISING THE WORK OF FIELD TEAMS WITH THE USE OF SURVEILLANCE TECHNOLOGIES**

One of the main challenges for improving the regulation and control of fishing activities is to ensure effective surveillance. It is of course essential to carry out regular patrols both day and night. However, the material and human costs of patrolling at sea are very high and a surveillance strategy cannot be based on this approach alone. It is therefore crucial to coordinate a surveillance strategy at sea and on land, and in particular to focus effort on the control of fishmongers and restaurants.

Even though the presence of rangers in the field is essential, the use of technologies such as video-surveillance, drones, radars can allow to maintain 24-hour surveillance on large areas. The use of these technologies raises a number of technical and legal constraints, but should be closely and systematically examined by MPAs and other authorities (especially in the case of large MPAs).

## **ADAPTING THE REGULATION OF RECREATIONAL FISHING**

Beyond the issue of illegal resale, the strong growth of recreational fishing activity and the evolution of its practices call for an adaptation of regulatory frameworks.

As mentioned already, many managers (supported by the results of some studies) perceive that recreational fishing catches are sometimes equivalent in quantity to catches from small scale fisheries. Although it is advisable to conduct studies and regular monitoring of recreational fishing activity, the lack of data or 'best' MPA management plan should not be a reason to delay action to address imminent threats.

The increasing number of recreational fishers and the fast evolution of gears and techniques (particularly tracking techniques) calls in many MPAs (and beyond) for rapid adaptation of regulations (licences, quota, zoning and enforcement).

## TOWARDS 2% OF EFFECTIVELY ENFORCED NO-TAKE ZONES

No-take zones are recognised as an effective management tool for the regeneration of fish stocks. In the Mediterranean, some successful examples have brought evidence of biomass export from old, well enforced, no-take MPAs and fishing reserves.

The participants in the 2016 Forum of Marine Protected Areas in the Mediterranean (Tangier 2016) updated the Mediterranean MPA Roadmap with the recommendation to increase the coverage and implementation of no-entry, no-take and no-fishing zones, within either existing or future MPAs, from the current coverage of 0.04% of the Mediterranean Sea to reach at least 2% of effectively managed and enforced fully and strongly protected zones, especially in key functional areas (cf: [Mediterranean MPA Roadmap 2016](#), [Tangier declaration](#)).

Participants in MedPAN exchanges this year stressed the need to designate permanent no-take zones, that may be completed with other measures such as seasonal or temporary closures in adjacent zones within a buffer.

No-take zones should target ecosystems (rather than species) and should correspond to the portion of MPA surface necessary to enable regeneration followed by a significant spillover (reserve effect). Recent scientific research stated that a minimum size of 4 Km<sup>2</sup> should be designated in order to ensure efficiency of no-take zones ([see reference paper here](#)).

Another necessary condition for a successful no-take zone is that it must be properly and effectively controlled and enforced. This recommendation may seem obvious, but it should be emphasised more explicitly, as quantified coverage objectives often tend to overshadow management issues. During MedPAN workshop, the question was asked how many of the 0.04% of existing no-take zones are actually enforced? Half of them maybe? If so, this would mean that the objective of extending coverage to 2% would increase the current coverage by a factor of 100.

The use of cost-effective monitoring technologies will be therefore essential to achieve the objective of increasing coverage of effectively managed and enforced strongly protected zones to 2% of the Mediterranean sea.

## Opportunities at network level

- › **Advocate at the national levels the need to empower MPA rangers with police capacity and to enhance coordination between legal bodies and instruments.** This approach could be supported by documented feedback and synopsis of good practices from countries that have granted these prerogatives to MPAs and have successfully overcome legal obstacles and inconsistencies between administrations.
- › **Contribute to raising awareness among prosecutors** to engage them in addressing environmental offenses in MPAs by developing exchanges between the MedPAN network and the European network of environmental prosecutors.
- › **Contribute to raising awareness among coast guard and other police services** to engage them in addressing illegal fishing practices in MPAs (and beyond).
- › **Raise awareness at national levels on the need for better regulation of recreational fishing** (licenses, quota, gear, zoning, and enforcement). The advocacy could be based on an inventory of old and new techniques and gear used in recreational fishing (in particular tracking technologies) that should be banned or better regulated in MPAs (and possibly also outside).
- › **Identify strategy to reason the lobbies of recreational fishing**, in order to put an end to 'free fishing' in countries where recreational fishing is not subjected to license and quotas (e.g. France).
- › **Advocate at the national levels the need to increase the coverage of no-take zones and to ensure they are properly controlled and enforced.** This advocacy should be preliminary based on a mapping of strictly protected areas (no fishing, no take, or no go zones) to take stock of the current coverage for each country. It should be supported by documented recommendations based on the feedback from successful no-take MPAs, as well as on tangible arguments compiled from the scientific literature (specific study on spillover effect, areas to designate, minimum size, connectivity...). The approach should be divided into advocacy and communication tools to be defined according to the different targets to be considered (administrations, pro and recreational fishers, other users). In 2019, MedPAN will develop ad'hoc communication tools on benefits of no-take zones. Surveillance and enforcement issues should be highlighted very explicitly, with a set of recommendations, including recommendations on applicable technological solutions.
- › **Contribute to strengthen MPA managers and fishers knowledge and understanding of Natura 2000 conservation objectives, as well as awareness of EU fisheries policy framework and funding opportunities.** Within its new MedPAN strategy, internal communication within the network will facilitate such understanding and awareness.
- › **Make available to MPA managers a catalogue of existing monitoring and surveillance technologies.**
- › Regional cooperation projects can help to better understand issues and design solutions.

## 4. Economic sustainability of small scale fisheries

Small scale fishing has an important role in the preservation of cultural heritage and aquatic resources due to selective, ancestral and passive fishing techniques adapted to marine habitats. Small scale fishing creates added value in terms of local development, social and environmental sustainability through its ability to create short distribution channels and provides consumers quality products with greater confidence and ease. In the Mediterranean, small-scale fishing faces challenges related to limited means of action, profitability, competitiveness and market access difficulties in front of industrial and aquaculture products.

Based on the results of the study conducted by MedPAN in 2018 (80 responses from 17 countries), the economic sustainability of small-scale fisheries is the management area in which MPAs are the least experienced (42% say they have no experience at all).

### PROMOTING CERTIFICATION MECHANISMS FOR SMALL SCALE FISHERIES

More specifically, enhancing the value of products from sustainable small scale fisheries by supporting certification/labelization mechanisms is considered a high priority by 57% MPAs, whilst 73,5% say they have no experience in that field.



As a prerequisite to a certification project, fishers must be aware of the importance of their fishing methods and practices, as well as of the importance of maintaining them and passing them on to future generations: know the history of the fishery, its evolution, the natural materials that can be used, the impact on the fish stock... They will then be able to value their approach.

As the fishing community must be the project leader, the protagonist of the certification, a good organisation is needed. MPAs should therefore promote the creation of fishers' cooperatives, producer groups or organizations, micro-enterprises or other structures in order to better organize their activities, facilitate the labelling of fishing methods and products, but also mutualize costs, add value, and ensure a sale directly or in short circuits.

The certification process requires working on marketing, financial, technical and managerial support from the very beginning of the project. For this, fishers should work with NGOs to identify funds and local market actors who could also participate in the project inception and contribute to its progress and support.

Based on previous experiences, the work towards environmental sustainability and certification can greatly benefit from the help of technicians (e.g. biologists working either as staff within the fishers' associations or as external consultants) and the collaboration with local environmental NGOs.



## Opportunities at network level

---

- › **Raise awareness among MPAs on the support role they can play to help local fishing communities strengthen their capacities in terms of sustainability improvement, distribution, quality, processing and enhancement of fishery products, and become involved in a certification and labelling process of sustainable fish products.** This could be supported by the publication of a collection of case studies presenting different types of certification schemes and market based incentives successfully tested by local fishing communities.
- › **Promote synergies between the MedPAN and Slow Food/Slow Fish networks** as a structuring approach to enhance, sustain and and bring value on collaborations between MPAs, SSF, and local communities for the benefit of biodiversity conservation and the sustainability of small scale fisheries. The adaptability, the economic accessibility to SSF, the community based approach, and non-proprietary philosophy of the Slow food certification scheme, are consistent with the MedPAN network's approach and the diversity of contexts encountered in the Mediterranean. This network-to-network collaboration therefore appears to be an important opportunity for MPAs and local fishing communities.
- › **Implement technical exchange visits to meet fishing communities organised in cooperatives and with a successful experience in certification schemes,** would encourage other fishers to structure themselves locally and replicate such initiatives (e.g. Cofradias in Ibiza at the initiative of the label PEIX SI!)
- › **Develop cooperation between MedPAN and FARNET (the European Fisheries Areas Network) to encourage relationships between MPAs and FLAGS** in order to build practical working group (e.g. knowledge Hub) and bottom-up initiatives for fostering socio-economic development within local communities around MPAs. Indeed, the mapping of EU MPAs and Natura 2000 marine sites is overlapping that of FLAGS, suggesting opportunities for local collaboration. As a preliminary step, MedPAN and FARNET should communicate to MPA and FLAG managers via their websites and newsletters in order to highlight possible local synergies (basing on examples). MedPAN could then give MPAs the contact of their neighbouring FLAG, and FARNET reciprocally inform the FLAGS of the contacts of the nearby MPAs, so that they can contact each other if they wish.
- › **Contribute to education and awareness-raising towards consumers to enhance the image of the small-scale fishers and products** (in relation to health, environment, cultural and socio-economic aspects of coastal communities, etc.).
- › **Contribute to increasing the visibility of Pescatourism locally and internationally.**
- › **Contribute to strengthen the capacities of fishers in Pescatourism** (especially on marketing and communication), through exchange visits and training.

## PROMOTING INVASIVE AND LOW-VALUE SPECIES CONSUMPTION

Promoting NIS value on local markets, as well as promoting unwanted by-catches that are not usually marketed, can allow reduce the pressure on main targeted species and provide an additional source of income for fishers. This can be achieved by developing actions involving fishers to promote culinary practices (recipe books, day from sea to plate...) and through cooperation between fishers and restaurants.

### Opportunities at network level

- › **Document a collection of case studies showcasing good practices and recipes.**

## PESCATOURISM AS AN ALTERNATIVE INCOME-GENERATING ACTIVITY AND A WAY TO REDUCE FISHING EFFORT

WWF proposes to define Pescatourism as follows: “Pescatourism consists in an economic activity run by professional fishers with tourists on board, as fishing activity diversification. This alternative income activity should reduce the fishing effort, achieve sustainable management of fishing resources, and promote the cultural heritage of fishery”.

Pescatourism is based on the following three principles: 1) contribution biodiversity/fish recovery, 2) promotion of the cultural heritage of artisanal fishing, and 3) ensuring long-term income through business diversification.

As an alternative income-generating activity and a way to reduce fishing effort, Pescatourism can be a good tool to build closer relationship between MPAs and local fishers, start co-management and help achieve MPA compliance. MPAs should thus support the development of pescatourism within small scale fisheries communities, by strengthening fishers association and raising awareness on the potential benefits of the activity and promoting the role of fishermen as historical memory and ambassador of cultural heritage.

The objective, however, is not to replace fishing activity with pescatourism. Pescatourism should be considered as one of several solutions to support the sustainability of the small scale fisheries sector. Also, it is crucial to clarify the difference between Pescatourism and taxi-boating in order to avoid losing the fishing profession towards tourism sector.

Pescatourism will generally not be suitable for all fishers in the community. Indeed, the activity requires communication and marketing skills. Fishers will thus need to strengthen their capacities in these fields, to be able to develop a solid business plan to achieve long-term economic revenues and build strong connections with the sustainable tourism sector. The activity will be more easily promoted among the new generations of fishers. Also, it is important to ensure that this new activity, which can generate attractive income, does not lead to conflicts within the community.

As a new activity, Pescatourism is often subject to strong legal and administrative constraints. In several national contexts, the administrative procedures need to be clarified.

### Opportunities at network level

- › **Promote WWF principles on Pescatourism within the MedPAN network.**
- › **Advocate at the national levels the need to clarify administrative procedures to facilitate the development of pescatourism activity.**

## ARTIFICIAL REEFS

Marine Protected Areas (MPAs) and artificial reefs (ARs) are increasingly regarded as interesting management measures, in that they contribute to the conservation of ecosystems, the sustainability of fisheries, and because they can be helpful in zoning coastal areas in order to reduce conflicts between users. These two tools can be complementary under certain conditions.

### ARTIFICIAL REEFS DO NOT REPLACE NATURAL ECOSYSTEMS

Artificial reefs can produce biomass with highest yields than the best natural habitats, but they are not “fish fountain”. ARs are not closed systems but interact with natural habitats. Fish do not stay continuously on the ARs, but move within the whole area. To ensure connectivity, ARs must be close to natural ecosystems and currentology must be taken into account.

At a time when a lot of money is being spent on ecological restoration projects, it is important to recall that ARs do not replace natural ecosystems but depend on them. The use of financial resources should therefore seek the best possible adequacy between conservation and development.

### SUCCESSFUL ARS REQUIRE CAREFUL PLANNING AND MANAGEMENT PLAN

Artificial reefs are not a magical tool and need to answer a specific need. They require careful planning to be successful, with clear objective, well targeted immersion zone, case specific environmental impact assessment throughout the process, and monitoring after deployment.

For the most part, the potential negative impacts of artificial reefs can be mitigated by careful planning and appropriate selection of sites, appropriate design and construction materials based both on the purpose of the reef and the oceanographic and ecological conditions of the site.

Artificial reefs should be immersed in marine protected or managed areas in order to ensure that the regeneration of the fishery resource is not hampered by the concentration of fishing effort on the reef.

## ARS NEED TO BE INCORPORATED IN THE MPA OVERALL STRATEGY AND GLOBAL MANAGEMENT OF FISHERIES

ARs are a multi-functional tool. In addition to the regeneration of the fishery resource, ARs can effectively contribute to the zoning of the fishing ground by preventing illegal trawling within the coastal zone (3 nm).

They also can be attractive diving sites, interesting educational materials for awareness raising, and may be a suitable substrate for the installation of ecological mooring (including for large yachts).

However, it is once again essential to clarify the purpose of artificial reefs before their deployment and to incorporate them as a tool with other complementary measures in the MPA management plan.

## Opportunities at network level

- **Take stock on the existing guidelines and related resources on Artificial Reefs (guide from the FAO, Cepralmar, London convention), and if necessary update them in the form of a practical guide for MPAs.**



## 5. The added value of MPA networks

Three discussion sessions focused on the benefits of network approaches to MPA management. A session based on the example of Spanish MPA networks focused on the national level, another one showcasing several network case studies around the world addressed the Regional and sub-regional levels. The third discussion session provided an overview of the funding challenges faced by MPAs in the Mediterranean and beyond and highlighted the need for coordination at local, national and regional level to ensure long-term reliable funding for MPAs.

## Opportunities at network level

- The network should assure a common baseline for the drafting management plans, including zoning principles, surveillance, legislation etc.
- The network should assure the participation of all stakeholders in the process of drafting management plans, in the development of the different activities in the area and in solving conflicts between different users.
- Regional Networks and networking at Transatlantic level serve to MPAs managers to work across boundaries on ecological and ecosystem conservation issues. It is important to convince decision-makers to commit to work on transboundary ecological problems, and that networks are a good way to approach those issues.
- By joining forces, the regional MPA networks gather their voices and can pass MPA messages to higher levels and especially at international level.
- When the message reaches local governments from above, it helps MPA managers. Receiving the message from both sides (local and higher level) gives more credibility to the needs raised by the managers. It is important to identify key messages and to spread them through networks (at national, sub-regional, regional, transatlantic levels) and through local MPA managers; so those messages can reach political layers at all levels (from local to international).
- Synergies between regional / sub-regional / national networks and between regional MPA



networks are mutually beneficial and will be explored in the near future to keep improving their efficiency (data and information sharing, communication messages, sharing of good practices, fundraising...).

- There is a need to balance the project approach (and to ease access of MPAs to those projects like European ones, through multi-MPAs and collaborative approaches) and the need to find sustainable funding sources for MPAs to support maintenance costs over time.
- Sustainable financing mechanisms (such as the association for sustainable financing of MPAs) have to be supported at all levels; examples of such mechanisms can be found in Latin America (RedLAC). There is possibility to establish an endowment fund, where different countries or institutions block a large sum of money and then interests can be used to support costs of several MPAs.
- MPAs need to find new ways of funding, not only through project approach, especially by exploring possible mechanisms and mobilizing people to attract funds from national government but also from tourists and private sector (see also the potential linked with the social responsibility of private companies).
- Promote and support MPA financing needs evaluation, business planning (especially using MedPLAN tool developed in 2014) and fundraising. MedPAN could set up a working group on MPA financing to provide a continuous support to MPAs on the crucial issue of financing. Collaboration between Regional MPA networks could also contribute to get to higher scale for MPA financing





# Introductory plenary sessions

## Marine Protected Areas and Small Scale Fisheries in the Mediterranean

**Speaker: Jean-Michel Culioli (Natural Reserve of the Strait of Bonifacio, Corsica, France) - [Jean-Michel.Culioli@oec.fr](mailto:Jean-Michel.Culioli@oec.fr)**

As part of the joint opening session held with the Second marine Natura 2000 seminar, Jean-Michel Culioli introduced the topic of the workshop from his long experience as a MPA manager and Scientific officer in the Natural Reserve of the Strait of Bonifacio. This introduction highlighted the essential collaboration between MPAs and Small-scale fisheries.

The presentation provided a characterisation of fisheries in the Mediterranean, recalling that 85% of stocks are overexploited at biologically unsustainable levels.

Small-scale fisheries traditionally represent an important share of the fisheries sector in the Mediterranean and Black Sea and their considerable role in the region has long been recognized: 14% of catches for 20% of the economic value of total catches, 77 000 vessels, more than 200 000 fishers or associated jobs (source: FAO-GFCM).

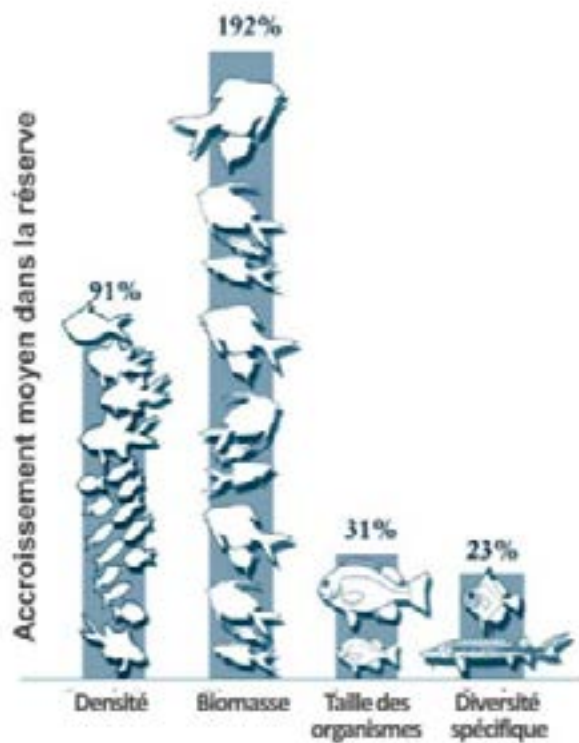
The presentation also recalled the FAO definition of artisanal or small-scale fishing, referring to the structure of the fishing firm (limited capital, know-how, ownership of boats, etc.), to fishing activities occurring in the coastal area (geographical and technical limits with boats measuring less than 12 meters, trips limited to 12 to 24 hours, absence of trawling), and most importantly the nature of the activity that is characterised by multispecific fishery (exploitation of variation inter-monthly and inter-annual abundance of targeted animals). «Small-scale production mostly targets nearby markets and fresh, varied produce sold directly to consumers» (Sacchi, 2011)

As a counterpart to this characterisation of small-scale fisheries, Jean-Michel Culioli also presented an overview of the situation of Mediterranean MPAs, that to date cover 7,14% of the Mediterranean Sea surface, where fully and strongly protected areas (no-go, no-take, no-fishing zones) only cover 0,04% (source: MAPAMED 2016).



M. Mabari / MedPAN

The monitoring data from the Natural Reserve of the Strait of Bonifacio demonstrate the benefit of well enforced MPAs on fish stocks, showing a progression in terms of biomass and density in particular (see chart below), as well as spillover effect. These results come from half a century of collaboration between the Reserve and the fishers, including shared acquisition of data, education, testing...





Jean-Michel Culioli concluded his presentation by stressing the importance of sharing experience within the MedPAN network for the effective management of fishing activities in MPAs. These points of conclusions and recommendations are summarized in the list below.

### **Experience-sharing within MedPAN as a key**

- Continue to build MPAs in direct contact with small scale fishers
- Commitment of all (fishers, managers, etc.) to increase the percentage of no-take zones equipped with management and monitoring resources and achieve the Tangier 2% objective.
- Imagine adaptive management processes Manager-fishers for Partially Protected Areas
- Engage SSF towards responsible fishing in MPAs (gear, target species, etc.).
- Continue to enforce MPA regulations
- Assessment of the state of conservation of biodiversity and resources (inside outside, before after, in-situ and ex-situ in fisheries).
- Ongoing scientific evaluation of the effort and production of all the fishing activities in MPAs
- Emphasize the evaluations of Partially Protected Areas (PPAs)
- The shared management of the resource is essential and priority must be given to small-scale fishing in relation to:
  - » industrial fishers in political decisions on the allocation of aid and quotas.
  - » recreational fishers (rapid introduction of quotas for fishing tourism in MPAs where recreational fishing is permitted).
- Managers (including MPAs) must take their responsibilities and promote the precautionary principle to protect the fishery resource at a Mediterranean level.





# Introduction to the workshop breakout sessions

**Speaker: Pierre Vignes (MedPAN Secretariat, France) - [pierre.vignes@medpan.org](mailto:pierre.vignes@medpan.org)**

Pierre Vignes (MedPAN Secretariat, France) gave a thematic insights to the programme of the workshop. After recalling the objectives and expected results of the workshop, he introduced the breakout sessions in relation to the main thematic headings. He also shared some of the key results of the survey conducted prior to the workshop reflecting the perception of some 80 MPA managers from 16 countries around the basin on the management of fishing activities in MPAs. This introduction also provided a brief overview of the other experience-sharing activities conducted by MedPAN in 2018 on the management of small scale fisheries in MPAs in the framework of the MAVA Foundation's fisheries Action Plans and Interreg Med FishMPABlue2 project.

## FishMPABlue2 main achievements

**Speaker: Luca Santarossa (Federparchi, Italy) - [luca.santarossa@parks.it](mailto:luca.santarossa@parks.it)**

Luca Santarossa presented the Interreg Med FishMPABlue2 project and its main achievements. He recalled the overall goal that is to increase the capacities of Mediterranean MPAs to sustainably govern small scale fisheries, as well as the objectives of the project:

- Test the “Governance toolkit for small scale fishery” in different typologies of MPAs, in order to have an upgraded version of it.
- Disseminate the tested toolkit among the maximum feasible number of Med MPAs
- Enhance integration of principles and recommendations in national and international policies to ease informal/formal engagement of stakeholders in small scale fishery management within MPAs

Luca Santarossa recalled the FishMPABlue2 project partnership and pilot sites and provided an overview on the activities undertaken within the project. The main focus of the presentation was to introduce the “Governance toolkit for small scale fishery” under its 5 components for a successful governance of SSF in MPAs (enforcement, fishers engaged in MPA activities and in MPA Board, incentive for sustainable fishing, management plan) and the listed ready-to-use management measures identified in the the toolkit.

## Collaborative Leadership Forum

**Speaker: Kate Hogg (WWF Mediterranean Marine Initiatives, Italy) - [khogg@wwfmedpo.org](mailto:khogg@wwfmedpo.org)**

Kate Hogg presented the the Leadership Forum designed by WWF MMI to identify and develop the capacity of young individuals working in MPAs around the Mediterranean. The goal of this initiative is to create a strong network of capable and committed leaders who can bring about positive change for marine conservation. Five young leaders of the Forum volunteered this year for the MedPAN experience sharing workshop to which they made an essential contribution for note-taking, communication on social networks and logistics.



# Discussion session

## Assessing ecological and socio-economic dimensions of Small Scale Fisheries management in Mediterranean MPAs

Axis 1. Knowledge and monitoring of fishing activities in and around MPAs

**Chair:** Antonio Di Franco, University of Nice, France - [difry@libero.it](mailto:difry@libero.it)

**Reporter:** Luca Santarossa - [luca.santarossa@parks.it](mailto:luca.santarossa@parks.it)

**Note-taking:** Aymen ABIDI - [aymabidi@yahoo.fr](mailto:aymabidi@yahoo.fr)

Small Scale Fisheries (SSFs) are complex activities encompassing the ecological and socio-economic dimensions of the management of natural resources. Specifically, the management of SSFs can affect the environment through the extraction of fishing resources and therefore potentially have an impact on marine ecosystems. It also has a human dimensions through modification in fishers incomes and a large set of social variables. Due to this multifaceted nature, there is a pressing need to collect relevant data concerning the multiple aspects of SSFs management in order to develop and adapt sound management plans and strategies. This session showed the overall approach adopted in the FishMPABlue2 project to assess multiple dimension of Small Scale Fisheries management in 11 Mediterranean MPAs., and focused on 3 specific case studies.

## Small Scale Fisheries in Landscape park Strunjan

Axis 1. Knowledge and monitoring of fishing activities in and around MPAs

**Speaker:** Luka Kastelic, Landscape park Strunjan, Slovenia- [luka.kastelic@gov.si](mailto:luka.kastelic@gov.si)

Landscape Park Strunjan is located in Slovenia and represents the largest Marine Protected Area of the Gulf of Trieste.

It's very important to involve local fishers in the management of the protected area with cooperation in terms of communication and assistance in monitoring of biodiversity, preventing illegal activities and helping in monitoring of the sea and the coast in general.

We participated as a pilot project in the FishMPABlue2 project. With fishers, we monitored catches at landing, carried



M. Mabari / MedPAN

questionnaires, placed video surveillance cameras in the nature reserve and created a video about the underwater world and fisheries intended to raise awareness about nature protection. We also established cooperation with fishers who are informing us about unusual activities or findings in the park with an emphasis on the sea and the coast. Cooperation with fishers through projects helped realise planned activities today and in the future.



[Download presentation](#)

## Es Freus Marine Reserve: A participatory process as a tool to improve the governance of the protected area

Axis 1. Knowledge and monitoring of fishing activities in and around MPAs

**Speaker: Francisco Gonzalo Sobrado Llompart, Es Freus Marine Reserve / Gen-GOB Eivissa, Spain - [fransobrado33@hotmail.com](mailto:fransobrado33@hotmail.com)**

Es Freus Marine reserve is located between Ibiza and Formentera in the Balearic Islands, Spain. It was created in 1999 and is managed by the Balearic Government; it has 15.000 ha mainly consisting of *Posidonia oceanica* meadows. Within the framework of the FishMPABlue2 project, 163 vessels' operations were analysed, 22 questionnaires were performed, and as a governance measure, stakeholders in participatory workshops decided on the installation of a video camera system in the No Take Zone to improve surveillance. As a main conclusion, this project has increased the cooperation and communication between fishers, administration, NGO's and other users of the reserve.



[Download presentation](#)

# Lessons learned from the FishMPABlue2 project implementation in a crowded and multi-use MPA: insights from the National Marine Park of Zakynthos

Axis 1. Knowledge and monitoring of fishing activities in and around MPAs

**Speaker: Charalampos Dimitriadis, Zakynthos National Marine Park, Greece - [xdimitriadis@marine.aegean.gr](mailto:xdimitriadis@marine.aegean.gr)**

The implementation of the FishMPABlue2 governance toolkit, the socioeconomic assessment and the ecological monitoring in the MPA of the National Marine Park of Zakynthos proved to be a challenging and didactic task. Hence, lessons learned were reported in the implementation of fisheries related governance and management measures in a crowded and multi-use MPA in which fish protection and conservation is not the top priority management objective.



[Download presentation](#)



## Session conclusions and recommendations

- Sound data collection on different aspects of small scale fisheries management (i.e. ecological and socio-economic) is crucial to plan effective management strategies.
- To carry out socio-economic monitoring, fishers engagement is crucial. To do so it is necessary to build trust between managers and fishers.
- Trust is difficult to build, but it can be broken very easily. Therefore continuity and consistency in relationship between managers and fishers is crucial. It is also important to base these relationships on clear agreements: these can be informal at the beginning (when starting engagement), but then they need to be formalized and the roles of the two parts need to be stated clearly.
- Engagement can be started communicating with “key” fishers (the most receptive), who will then convince other fishers in the community that working with MPA managers can lead to a win-win. Managers should provide some concrete benefits to fishers for their availability and participation (e.g. new nets, ice machines etc.).

## Recreational fishing in MPAs: is it still a sustainable activity?

Axis 1. Knowledge and monitoring of fishing activities in and around MPAs

**Chair: Patrick BONHOMME, Parc national des Calanques, France - [patrick.bonhomme@calanques-parcnational.fr](mailto:patrick.bonhomme@calanques-parcnational.fr)**

**Reporter: Susan Gallon - [susan.gallon@medpan.org](mailto:susan.gallon@medpan.org) / Chloë Webster - [vahaolana@gmail.com](mailto:vahaolana@gmail.com)**

**Note-taking: Marta Sostres - [sostres.marta@gmail.com](mailto:sostres.marta@gmail.com)**

Recreational fishing is a booming activity in the Mediterranean, since it is estimated to represent more than 10% of total fishing production (EU Mediterranean: guaranteeing sustainable fisheries, Fishing in Europe, 2004). Still poorly documented, the impact of recreational fishing on marine resources is the subject of a growing number of studies using sampling techniques different from those used for professional fishing. Beyond the need to have monitoring data, more and more MPA managers are questioning the potential effectiveness of the technologies and resources



available today (gear, location, Internet, drone tracking) and testifying to the urgent need to implement appropriate management measures for recreational fishing activity. The implementation of new regulations in consultation with stakeholders, in particular the establishment of quotas, is a major challenge for MPAs (and beyond) to combat the illegal resale of recreational fishing catches observed throughout the Mediterranean. This session, which introduced several case studies of MPAs, discussed possible ways of improving the monitoring and management of recreational fishing activity.



## Spatial and temporal dynamics of recreational fishing practices and yields in the Golfe du Lion Marine Natural Park, and management implications

Axis 1. Knowledge and monitoring of fishing activities in and around MPAs

**Speaker: Coraline Jabouin, Golfe du Lion Marine Natural Park, France - [coraline.jabouin@afbi-diversite.fr](mailto:coraline.jabouin@afbi-diversite.fr)**

One of the main objectives in the management of marine resources is to identify the factors that determine the extent of the fishing effort and the consequences on the stocks of targeted species. However, the highly heterogeneous nature of this activity complicates the task, particularly for recreational fishing, which practice is potentially influenced by many external factors. Various studies have been conducted over the past 15 years to characterize recreational fishing activities in the Golfe du Lion Marine Natural Park. This presentation described the results of the analysis of data from some monitoring studies on (1) variability in user use rates over a full annual cycle related to various environmental factors, and (2) changes in recreational fishing yields over a 10-year period. The implications of these results for the management of fisheries resources were also discussed.

*Authors: Kayal M., Cigala M., Cambra E., Soulat N., Mercader M., Lebras A., Ivanoff P., Sébés L., Lassus-Debat A., Hartmann V., Bradtke M., Lenfant P., Jabouin C., Dubreuil J., Jogue M., Le Mellionec S., Brichet M., Binche J.L., Payrot J., Pelletier D., Saragoni G., Crechriou R., Clairicia, M., Verdoit-Jarraya M.*



[Download presentation](#)

## Presentation of the Methodological guide for the monitoring of fisheries in Mediterranean MPAs

Axis 1. Knowledge and monitoring of fishing activities in and around MPAs

**Speaker: Reda Neveu, MedPAN Secretariat, France - [reda.neveu@medpan.org](mailto:reda.neveu@medpan.org)**

This session was the opportunity to introduce MedPAN Methodological guide for the monitoring of fisheries in Mediterranean MPAs that is currently developed by the GIS Posidonie. As an example, a couple of protocol factsheets from the guide focusing on recreational fishing monitoring have been circulated among the participants.



[Download presentation](#)

# The management of recreational fishing in the Balearic marine reserves. Development of an application for mobile

Axis 1. Knowledge and monitoring of fishing activities in and around MPAs

**Speaker: Antonio Maria Grau Jofre, Es Freus Marine Reserve, Spain - [agrau@dgpesca.caib.es](mailto:agrau@dgpesca.caib.es)**

The Balearic Islands have 9 marine reserves, which cover 58,600 hectares and where the hook-and-line recreational fishing is allowed, with limitations. Recreational fishing is a popular activity in the archipelago, where there are 42,000 licenses in force (12,000 boats).

In some reserves anglers need a special permit to fish and, progressively, the Balearic government is implementing the obligation to declare the catches. To facilitate this statement, he has developed a mobile application that is already being used in the Llevant de Mallorca marine reserve.

## Recreational Fishing in Brijuni National Park

Axis 1. Knowledge and monitoring of fishing activities in and around MPAs

**Speaker: Sandro Dujmovic, Brijuni National Park, Croatia - [s.dujmovic@np-brijuni.hr](mailto:s.dujmovic@np-brijuni.hr)**

Brijuni is the smallest national park in Croatia. It consists in 14 islands with a total area of 33,95 km<sup>2</sup>, of which almost 80% of the surface is covered by the sea. According to the Fishery Law in the Republic of Croatia, national parks can themselves determine whether fishing in a protected area is allowed and in which way. Since 1983 only recreational fishing has been allowed in Brijuni, with strict rules and only in one zone. Research shows that they have 8 times more fish within the protected area than outside.



[Download presentation](#)

## Session conclusions and recommendations

- Need of regulation: licences, quota, gear, zoning (spatial planning) and enforcement for recreational fishing - In parallel need to strengthen awareness of the police in relation to surveillance and enforcement.
- Identify and share tools to facilitate the monitoring of recreational fishing activities in MPAs (sharing the mobile app developed in Es Freus Marine Reserve when ready).
- Ensure watch on new techniques and gear used by recreational fishing and take appropriate regulatory measures (need an assessment of new technology gear and technique).
- Need a dedicated MedPAN workshop on recreational fisheries, a catalogue of regulation and a data protocol to share catch data between MPAs.
- Education and awareness are needed to explain why restrictions and regulatory measures are being taken on recreational fishing.
- Identify strategy to reason the lobbies of recreational fishing - We need to put an end to 'free fishing' as recreational fishing weighs as much as professional fishing
- Need designated spatial area for recreational fishing so we can study its direct impact independently from professional fishing
- Need to identify old and new techniques/gear that should be banned from MPAs (and around?)

# Invasive species on MPAs: economic and ecological impacts to the artisanal fisheries sector

Axis 1. Knowledge and monitoring of fishing activities in and around MPAs

**Chair:** Maria del Mar Otero (IUCN) - [mariadelmar.otero@iucn.org](mailto:mariadelmar.otero@iucn.org)

**Reporter:** Magali Mabari - [magali.mabari@medpan.org](mailto:magali.mabari@medpan.org)

**Note-taking:** Lola Canizares - [lola.canizares@medpan.org](mailto:lola.canizares@medpan.org)

This session provided first an overview on the impacts of invasive species in MPAs and its implications to the fishery sector. It presented the draft proposals from the first workshop on invasive species in MPAs that took place earlier this year and with 2 case studies from the Eastern Mediterranean, we discussed how to leverage internal and external collaborations to take actions when invasive species are encountered. The session also highlighted the degree of commonality on this issue among MPAs and proposals have been discussed for action that could be implemented.



[Download presentation](#)

## Management of the pufferfish *Lagocephalus sceleratus* in Cyprus and measures taken surrounding the MPA of Cape Greco

Axis 1. Knowledge and monitoring of fishing activities in and around MPAs

**Speaker:** Melina Markou, Department of Fisheries and Marine Research, Ministry of Agriculture, Rural Development and Environment of Cyprus and Antonis Petrou, AP Marine, Cyprus and Artisanal Fishermen Representative - [apmarine@valicom.com.cy](mailto:apmarine@valicom.com.cy)

One of the remaining challenges to address a good governance of fisheries in the MPA of Cape Greco and its surrounding area is the issue of alien invasive species. These species, particularly some like the *Lagocephalus sceleratus* are thriving in this coastline. The Department of Fisheries and Marine Research conducted initial surveys to understand ecological and fisheries catches in the area on this species and the results provided some recommendations to address the problem. The results presented during this session highlighted the experience, the lessons learnt and the constraints encountered to address this problem (e.g. use of compensation mechanisms) as well as potential additional measures under discussion for future implementation.



[Download presentation](#)

## Socio-economic study on the impact of invasive species in Lebanese MPAs

Axis 1. Knowledge and monitoring of fishing activities in and around MPAs

**Speaker:** Maria del Mar Otero, Ziad Samaha, IUCN - [ziad.samaha@iucn.org](mailto:ziad.samaha@iucn.org)

This presentation highlighted the work developed by IUCN to assess the socio-economic implications of the arrival and expansion of invasive species populations on artisanal fisheries in Lebanese MPAs. This work conducted by a series of semi-structured interviews estimated the changes in catches and the socio-economic impacts on different fisheries métiers (longliner, gillnets, spear/traps, and trammel nets) along the coastline, revealed the commercial value of some species, the cost damage and the perceptions of different stakeholders. The work also provides important background elements to define a future strategy to mitigate the impact of invasive species in one of the areas most impacted by non-native fish species invasions.

## Session conclusions and recommendations

- More data needed on:
  - » invasive species to build up knowledge about reproduction, feeding areas...
  - » the impact of NIS on fisheries communities in MPAs
  - » changes in native species populations
- Promote NIS value on local markets to raise the value of these species.
- Promote the role of MPAs and their good conservation status to limit the invasion of non native species.
- Pay attention to scientific advice.
- Raise awareness of local populations to the species present, to what is being done and what is coming...



M. Mabari / MedPAN



M. Mabari / MedPAN

## Marine protected areas and aquaculture : addressing the question marks

Axis 1. Knowledge and monitoring of fishing activities in and around MPAs

**Chair: Catherine Piante (WWF France) - [cpiante@wwf.fr](mailto:cpiante@wwf.fr)**

**Note-taking: Reda Neveu - [reda.neveu@medpan.org](mailto:reda.neveu@medpan.org)**

Many Mediterranean Marine Protected Areas were in the last few years established in areas where aquaculture farms were already located. This workshop explored the interactions between aquaculture and MPAs. In which conditions are aquaculture and MPAs incompatible ? Compatible ? How can an MPA manager address an aquaculture farm? How should Maritime Spatial Planning policies address these interactions? Following the presentation of a series of case studies, a group discussion sought to answer these questions.



[Download presentation](#)



# Mediterranean MPAs and aquaculture: elements for a regional approach

Axis 1. Knowledge and monitoring of fishing activities in and around MPAs

**Speaker: Catherine Piante, WWF France - [cpiante@wwf.fr](mailto:cpiante@wwf.fr)**

This presentation provided an insight on the preliminary results of the survey conducted as part of the PHAROS4MPAs project on MPAs and aquaculture in the Mediterranean.

## Marine sea cage production systems presence close to the MPA of Karaburun-Sazani

Axis 1. Knowledge and monitoring of fishing activities in and around MPAs

**Speaker: Rigers Bakiu, Albanian Center for Environmental Protection and Sustainable Development, Albania - [bakiurigers@gmail.com](mailto:bakiurigers@gmail.com)**

The marine aquaculture sector is represented by marine sea cage farms located along the Ionian coast of Albania. In these aquaculture farms roughly 2000 tons of gilthead seabream and European seabass are produced. The Bay of Vlorë hosts the biggest companies in terms of production, investment and economic value, where most gilthead seabream and European seabass produced is exported toward EU countries, like Italy and Poland. The Karaburun peninsula and the Sazani island make up the first Marine Protected Area in Albania, since 2010 with the Decision of the Council of Ministers. The sea cage farm of Vlorë Bay is located in the eastern part of the Karaburun peninsula, which is close to the Sustainable Development Zone of the Karaburun-Sazani MPA. A general view of these farms production and value was presented together with possible considerations related to the threats coming from these sea cages and the fish biomass living inside them.



[Download presentation](#)

## Session conclusions and recommendations

- Gathering more baseline knowledge about the interactions between Mediterranean MPAs and marine aquaculture: number and types of MPAs / marine natura 2000 sites is key and it would be interesting to start a discussion with the General Fisheries Commission for the Mediterranean (GFCM) on this.
- Defining the position of the MedPAN network as regards to marine aquaculture is an important task, as marine aquaculture and in particular carnivorous fish production is developing fast in the Mediterranean.
- Many participants insisted that carnivorous fish aquaculture is not compatible with MPAs.

## The FishMPABlue2 approach towards the co-management of SSF in MPAs

**Chair: Luca Santarossa, Federparchi, Italy** - [luca.santarossa@parks.it](mailto:luca.santarossa@parks.it)

**Reporter: Antonio Di Franco** - [difry@libero.it](mailto:difry@libero.it)

**Note-taking: Aymen ABIDI** - [aymabidi@yahoo.fr](mailto:aymabidi@yahoo.fr)

SSF co-management in an MPA implies the involvement of fishers in the decision making process of the MPA managing body. To reach such goal, many preparatory actions can be implemented: those included in the "FishM-PABlue2 SSF governance toolkit" have been tested in 11 pilot MPAs and results were discussed in this session, including a focus on some case-studies.



[Download presentation](#)

## Developing cooperation with small scale fishers to reducing the fishing effort - The experience of Marine Protected Area of Torre Guaceto

**Speaker: Francesco de Franco, Torre Guaceto MPA, Italy** - [francescodefranco@gmail.com](mailto:francescodefranco@gmail.com)

In the framework of FISHMPABLUE2, the MPA of Torre Guaceto capitalized a more than a decade of collaboration with fishers in a shared commitment of reducing of fishing efforts.



[Download presentation](#)

## Co-management of Small Scale Fisheries in Telašćica MPA

**Speaker: Josipa Grbin, Telašćica Nature Park, Croatia** - [josipa.grbin@telascica.hr](mailto:josipa.grbin@telascica.hr)

The lack of influence of Small Scale Fishers on the fishery management processes is causing them not be engaged in fisheries policy development, which often endangers their livelihoods and endangers the sustainable use of coastal fisheries resources. In the next 4 years, we will try to establish new, more functional co-management based model for managing and controlling the fisheries resources of Telašćica Nature Park. MPA authorities will be able to establish a more effective control of illegal activities concerning the exploitation of fishing resources in the protected area. On the other hand, the voice of fishers who now act united will become significantly more important.



[Download presentation](#)

## Small-scale fisheries management close to the MPA of Karaburun-Sazani (Albania), based on collaborations between fishers, managers and scientists

**Speaker: Rigers Bakiu, Albanian Center for Environmental Protection and Sustainable Development, Albania** - [bakiurigers@gmail.com](mailto:bakiurigers@gmail.com)

Small Scale Fisheries in Albania has developed remarkably since the 1990s. In 2010, the area of Karaburun and

Sazani was declared as the first MPA in Albania. Though large-scale commercial fishing is prohibited in the MPA, the impact of the current fishing effort produced by Small Scale Fisheries on the coastal ecosystem and the fish community within the MPA is becoming important and needs to be considered together with the sport fishing activities. Based on previous and current projects surveys, we'll provide a general characterisation of Small Scale Fishing inside and outside the MPA, together with a comparison of catch rates, catch composition, Catch per Unit of Effort (CPUE) of most relevant species, as well as the fishing techniques at two artisanal fisheries of Vlora, operating in and around the MPA. Following a co-management approach, and the support of MPA managers and scientists, the involvement of fishers is currently becoming important.



[Download presentation](#)



## Session conclusions and recommendations

- A basic prerequisite for engaging the fishers in the management of MPA is that the MPA can assure an acceptable level of « control » of the territory.
- In order to raise fisher's availability in cooperating with MPA, their specific interest towards income must be taken in account since the beginning of the process.
- MPA must have a specific strategy and actual tools for supporting (local) artisanal fishers if they accept to cooperate with MPA, especially in relation with other competitive actors (industrial and recreational fishery, tourism, etc.).
- Fishers can be involved in surveillance activities if the anonymousness of their information is assured.
- Fishers' contribution to the MPA's monitoring activities can be significant, but must be compensated in some way.
- One of the main goal of involving the fishers is to jointly draft and adopt a specific management plan on SSF.

## Co-management of Small Scale Fisheries in MPAs: constraints, synergies and opportunities



**Chair:** Iuri Peri, Low Impact Fishers of Europe Italy - [italy@lifeplatform.eu](mailto:italy@lifeplatform.eu) and Christian Decugis Low Impact Fishers of Europe Italy Med.

**Reporter:** Marta Sostres - [sostres.marta@gmail.com](mailto:sostres.marta@gmail.com)

**Note-taking:** Moira Bursic - [moira.bursic@gmail.com](mailto:moira.bursic@gmail.com)

MPAs are an important tool for conserving resources and biodiversity and for managing human activities within defined areas. Within the framework of MPAs, Small Scale Fisheries (SSF) provide a local productive system where management approaches based on stable and long-term stakeholder collaboration can contribute positively to the identity of the territory whilst helping to create new economic opportunities – both for the fishing sector and other sectors such as tourism or environment.

In this regard, co-management has the potential to empower fishers and build their capacities to become responsible and competent actors in fisheries management. There are potential synergies to be built and mutual benefits to be obtained by combining conservation and SSF (socio-economic) objectives within in a defined zone/protected area.

MPAs provide a tool enabling relatively small, localised co-management projects to successfully bring state and non-state actors together and facilitate a dialogue and collaboration between them, establishing a basis for co-responsibility and improved acceptance of legally binding regulations, which in turn is contributing to addressing illegal, unreported and unregulated fishing practices and social conflict.

Co-management approaches provide an alternative to traditional management models. They are based on community-led approaches that recognise the role of the fishers as key players in the sustainability of fishery resources and the wider environment.

This discussion showcased several case studies in this regard, describing both the challenges faced and the positive outcomes. In a round table discussion the panellists and other invited fishers debated the key factors for success, including Elinor Ostrom's 8 principles, the need to build the capacity of SSF when constituting new MPAs, and to make the existing ones more effective and with improved governance.



[Download presentation](#)

## Community-based management in Pantelleria: A local community response to a Mediterranean-wide crisis

**Speaker:** Federico Gelmi, fisher from Pantelleria, Italy

Pantelleria is a small volcanic island mainly devoted to agriculture where professional fishing is rarely practiced, probably due to many factors. The decline of fish, the appearance of invasive species, and many other challenges have pushed the local association of fishers in the island to look for solutions to try and maintain their profession. The fishers shared their initiatives to establish a community-based management system, which they hope will be recognised and respected by the authorities and developed into a bona fide co-management system. They also described the festivals they have initiated to promote lesser known species.

## AMP Isola dei Ciclopi Acicastello, Italy

**Speaker:** Santo Castorina (Fisher at Ciclope islands)



Santo presented the situation where he fishes, and the fact that they only have 10 fishermen in the community. They have decided by themselves to reduce the number of hours in the sea from 10 hours to 2 hours. During those 2 hours they take less fish but of better quality. So, it was a decision that wasn't made by the authority and it is beneficial for the fishermen and for the fish.

## Session conclusions and recommendations

---

- Stimulate the social organization of fishers to create a space to exchange about common problems and potential solutions.
- Build trust and cooperation with national, regional and local authorities. Give fishers an active role, responsibility and power in the creation and management of MPAs and take into account their knowledge when establishing zoning and actions and control.
- Act NOW. Find a way to accelerate the administrative process so measures don't arrive to late
- Need for institutional and independent support. While some supports will need to be identified at a aggregated level.
- Need of training: The lack organisation and time prevents fishers from benefiting from training courses, since they have no way of accessing them.
- Since MPAs represent a model of co-management, in order to assess the real involvement of the small scale fisheries, it is proposed to start a transparent consultation among the fishers with the aim, on the one hand, to verify their real involvement and active role in the management of AMP, on the other hand to monitor and increase the degree of awareness and potential of their role.

## Community-based management of Small Scale Fisheries in MPAs

---

Axis 2. Stakeholders' engagement and participation in the fisheries management decision-making process

**Chair: Zafer Kızılkaya (Mediterranean Conservation Society, Turkey) - [kizilkaya.zafer@gmail.com](mailto:kizilkaya.zafer@gmail.com)**



**Reporter: Marta Sostres** - [sostres.marta@gmail.com](mailto:sostres.marta@gmail.com)

**Note taker: Moira Bursic** - [moira.bursic@gmail.com](mailto:moira.bursic@gmail.com)

Despite being the first in history, Mediterranean fisheries are a classic example of common resources management strategies that failed. Harvesting resources that have huge economic value always resulted in overfishing which is an evidence for lack of good management. In many areas, Mediterranean fisheries are currently managed through a centralized method administered by a top-down approach from external managers. Local people, that are most affected by the managed resource have little involvement of responsibility.

Community-Based Fisheries Management (CBFM) gives coastal communities and fishers primary responsibility for managing their coastal resources. This form of management is more localized and, therefore, management techniques can take many different forms depending on cultural and regional peculiarities. There is no written set of rules for CBFM in the Mediterranean where soft laws and code of good conduct prevail where stakeholder participation is the highest. CBFM focuses on community collaboration, and local participation can result in more productive and accurate ways of managing, monitoring, and maintaining coastal resources.

CBFM takes willingness, cooperation, involvement, and flexibility from community members to work together for the collective good. It is not easy to keep ongoing communication within the whole community where the competitive spirit of fishers often blocks cooperation. There are many emerging examples of CBFM within the diverse Small Scale Fisheries in the Mediterranean.



[Download presentation](#)

## Community-based management of SSF in Gökova

Axis 2. Stakeholders' engagement and participation in the fisheries management decision-making process

**Speaker: Zafer Kizilkaya, Mediterranean Conservation Society, Turkey**



Currently there is no legal base for community based management in SSF in MPAs in Turkey as in many other Mediterranean countries. Yet, Gökova Bay No Take Zones and fishery restricted areas was established by consensus of the fishing community members. Later the marine ranger system established by Mediterranean Conservation Society empowered community fishers for surveillance and enforcement in close cooperation with Coast Guard and General Directorate of Fisheries and Aquaculture.

Since the NTZs and proper enforcement by community rangers brought solid positive benefits to fisheries, a soft law of co-management process naturally appeared in Gökova Bay. Various follow up fisheries management projects, monitoring activities and government meetings have been held with the participation of local fishing community where officials could get the information at first hand. Economic prosperity enables the fishery cooperatives restating their status and roles where they are proactive on any decision making process. The co-management process in Gökova Bay has been awarded by General Fisheries Commission for the Mediterranean as the best practice in SSF in Mediterranean and Black Sea. In the future, system could easily be evaluated to have a legal base with government support.

# Mainstreaming the recovery of marine fisheries and ecosystems inside and outside MPAs through collective action and citizen science

Axis 2. Stakeholders' engagement and participation in the fisheries management decision-making process

**Speaker: Inés López, COBI - community and biodiversity, Mexico - [ilopez@cobi.org.mx](mailto:ilopez@cobi.org.mx)**

Bringing fishers to conservation actions, has improved both MPA performance and fisheries management. But this is a two-way channel, and science and management also can -and need to- address participation and co-development of solutions. After 50 years of Hardin's paradigm described in "The tragedy of commons", world-wide oceans still face the threat about how to organise, share and protect common goods in a sustainable way.

COBI has developed four building blocks to reverse the degradation of the marine environment and three transversal elements of our work (collective action, citizen science, and gender equality).



[Download presentation](#)

## First initiative of associations for the creation of a Marine Protected Area in Collo, Algeria

Axis 2. Stakeholders' engagement and participation in the fisheries management decision-making process



**Speaker: Mohamed Lamine Baaziz, AMP de Collo / association Rhummel Underwater, Algeria**  
[baazizlamine@gmail.com](mailto:baazizlamine@gmail.com)

The creation of a Marine Protected Area in Collo is the initiative of a collective of local associations active in the various fields of artisanal fishing, underwater activities, tourism and ecology.

This initiative is considered a first in Algeria and other countries of the Mediterranean basin, since it is usually the administration (fisheries, forests, environment...) that takes care of the whole process, from creation and classification to decree publication.

But the Collo association faces various difficulties: the status of the association as a project leader and the co-management of the MPA with partner administrations, including the main actors of civil society.

Several actions have been undertaken in order to find solutions with a legal basis: among these preparatory communication and engagement actions, various meetings (seminars and workshops...) have been organised for more than a year between several administrations directly or indirectly involved in the process of creating the MPA (General Directorate for Fisheries, General Directorate for the Environment...) and the associations that initiated the creation project, not to mention the inclusion of an operation to draw up the management plan as part of the DIVECO2 programme, a €15 million financing agreement signed between the Algerian government and the European Union aimed at increasing the country's economic diversification through sustainable development and improving the economic performance of the fisheries and aquaculture sector.



[Download presentation](#)



## Session conclusions and recommendations

- In the Mediterranean, due to its cultural dimension, community-based co-management should be applied, adopting a participatory governance between the community, NGOs, the scientific community and governments.
- Working together in the resolution of problems raised by the fishing community helps strengthening the mutual trust and relationship within community members and with authorities. Furthermore, this facilitates the implementation of the future measures.
- We should look at fisheries in its whole dimension, and include all the people involved in the system. Women, who represent around 50% of the fisheries, should be further recognized by the promotion of gender inclusive leaderships and legal frameworks.
- Legal frameworks, regulation and control of fishing activities



M. Mabari / MedPAN



M. Mabari / MedPAN



# Legal frameworks for the management of fishing activities in MPAs

Axis 3. Legal frameworks, regulation and control of fishing activities

**Chair: Jorge E. Moreno (Balearic General Directorate for Protected Areas and Biodiversity, Spain)** - [jemoreno@dgmambie.caib.es](mailto:jemoreno@dgmambie.caib.es)

**Reporter: Magali Mabari** - [magali.mabari@medpan.org](mailto:magali.mabari@medpan.org)

**Note-taking: Nawel KHELIL** - [nawkhelil@gmail.com](mailto:nawkhelil@gmail.com)

Many MPAs do not have specific regulations for fisheries in and around their boundaries and only general fishing legislation apply. This can sometimes generate problems when implementing the control of activities and the assignment of responsibilities. The existence of a specific regulation gives a chance to MPA authorities to make a special control of activities and monitoring in the area. Some examples of these tools have been shared (plans or specific legal documents) and analyzed the possibility of implementation in different scenarios as an attempt to offer a wide sample of possible solutions and practices done or intended for different areas and situations.



[Download presentation](#)

## Cabrera National Park Fisheries Management Plan

Axis 3. Legal frameworks, regulation and control of fishing activities

**Speaker: Jorge E. Moreno, Balearic General Directorate for Protected Areas and Biodiversity, Spain** - [jemoreno@dgmambie.caib.es](mailto:jemoreno@dgmambie.caib.es)

In 2001 the special plan for fisheries at Cabrera National Park was approved by the Government of the state. It took over 10 years to develop and approve this special plan for fisheries. Indeed it was built step by step, during an intensive regulatory process that based itself on all the legal instruments that constitute the wide legal framework that rules the park. The creation of Cabrera national Park in 1991 was the first time in the Balearic islands that a protected area included a marine zone, and that professional fisheries had to be regulated for the conservation of species.

Seventeen years later the plan is still working with the acceptance of fishers and remains a valid model of integrated and effective management for professional fishing activities in MPAs.

## Artisanal fishing as a tool for protecting fish stocks in MPAs and neighbouring areas: Algerian legal framework and objectives

Axis 3. Legal frameworks, regulation and control of fishing activities

**Speaker: Nadia Ramdane, DPRH Jijel, Algeria** - [ramdane.nadia4@gmail.com](mailto:ramdane.nadia4@gmail.com)

Revised in recent years, the legal framework that applies to fishing activities on the 1,600 km of Algerian coastline is oriented towards the sustainable management of biological resources, particularly fish stocks. It should be recalled that 95% of the fishing fleet in Algeria consists of small metiers and that the fishing effort is mainly focused on the coastal zone. The orientations of this legal framework are consistent with the ecosystem and intersectoral approach to integrated coastal land management promoted as a priority by the government. Ecotourism activities linked to Small Scale Fishing, such as Pescatourism, the promotion of underwater leisure activities, or the enhancement of little-known fish products, are part of this framework.

Despite administrative delays, the implementation of these new strategic and sectoral guidelines must be implemented on the ground, particularly in MPAs and protected fishing areas proposed by fishers, to which more stringent

regulatory provisions apply. Control and monitoring for compliance with regulations in areas also remains a major challenge.



[Download presentation](#)

## Specific fishing regulations in Croatia: the case of Kornati National Park and Telašćica Nature Park

Axis 3. Legal frameworks, regulation and control of fishing activities

**Speaker: Vladislav Mihelcic, Kornati National Park - [vladislav.mihelcic@gmail.com](mailto:vladislav.mihelcic@gmail.com) & Milena Ramov, Telašćica Nature Park, Croatia - [milena.ramov@telascica.hr](mailto:milena.ramov@telascica.hr)**

Kornati National Park was proclaimed in 1980. It covers 217 km<sup>2</sup>, ¾ of which being marine and includes 89 islands, islets and reefs. 620 landowners and about 25 permanent inhabitants live in the National Park. They mostly deal with olive tree growing and traditional sheep farming, but also with tourism in the last 50 years. They fish for food (mostly with fishing nets) during their stay in the area of the park. Since 2013, traditional fishing in Kornati National Park is forbidden and only recreational fishing is allowed.

Fishing activities in Nature Parks in Croatia are regulated through the Fisheries Act with no differences in size and type of fishing gear outside and inside protected areas. Specific regulations are currently being developed and adopted, and the best way to do it is through co-management with local fishers and other relevant stakeholders. Nature Park Telašćica established a local governance cluster and adopted a draft proposal for the regulation of Small Scale Fishing in the protected area.



[Download presentation](#)



## Session conclusions and recommendations

- Many MPAs do not have specific fisheries regulations, whilst regulations outside the MPA are made by authorities that do not have competences inside. Often, there is a conflict of competences between the Ministry of Agriculture/Fisheries and the Ministry of Environment.
- The main basis that seems useful to avoid such conflict is to empower fishers to become the voice of the area/MPA that is brought to the institutions/politicians - some form of co-management is necessary to ensure the long-term success and sustainability of the activity.
- The sustainability of the fishing activity is an objective both for small scale fishers and park authorities.
- Regional cooperation projects can help to better understand issues and design solutions.
- Fishers and society need support to understand and adapt to new regulations, especially when these come rapidly in newly designed MPAs.
- The availability of data about the activity needs to be improved to better inform law makers and ensure laws are adapted.

# Proposal of governance model for management of small scale fisheries in MPAs

Axis 3. Legal frameworks, regulation and control of fishing activities

**Chair: Biljana Aljinovic & Alex Milden (IUCN Med)** - [Biljana.Aljinovic@iucn.org](mailto:Biljana.Aljinovic@iucn.org)

**Reporter: Irene Morell** - [irene.morell@medpan.org](mailto:irene.morell@medpan.org)

**Note-taking: Nawel KHELIL** - [nawkhelil@gmail.com](mailto:nawkhelil@gmail.com)

Legal frameworks provide the basis for MPA management, for what should be preserved and how, and how fisheries in and around them should be managed. In this session we considered how these legal frameworks can enable or hinder good management of small-scale fisheries (SSF) in MPAs.

The FishMPABlue2 project, funded by Interreg Med, is testing a governance toolkit for SSF. The experiences of three of the pilot sites have been presented. What challenges and barriers did they experience in testing them? How widely are these experiences shared? Are there common themes?

A new governance model is proposed, based on these experiences. Is it widely transferable? What legal and other barriers could be encountered? How can it be rolled-out, and where?

The session received stimulating presentations from two FishMPABlue2 pilot sites. These discussed the successes and barriers to implementing the FishMPABlue2 governance toolkit in their local contexts.



[Download presentation](#)

## The Côte Bleue Marine Park: a success story in co-construction and partnership with Small Scale Fisheries for 35 years

Axis 3. Legal frameworks, regulation and control of fishing activities

**Speaker: Eric Charbonnel, Parc Marin de la Côte Bleue, France** - [charbonnel.eric@parcmarincote-bleue.fr](mailto:charbonnel.eric@parcmarincote-bleue.fr)

The Cote Bleue Marine Park (PMCB) was created 35 years ago on the basis of a co-construction with local fishers and a “bottom-up” approach. During the FishMPABlue2 project, PMCB chose 3 implementation tools:

- (i) Strengthen fisher's involvement in MPA management by organising regular meetings between maritime administrations of the French State, fishers' representatives (Regional Committee of Fisheries CRPMEM PACA), local fishers of the Côte Bleue territory and the Park, that creates the link between all these players;
- (ii) Improve the surveillance effort in all MPA for 6 months during winter, especially at night and on [www.marinetrafic.com](http://www.marinetrafic.com) to check “illegal” activities (like cut off AIS transponder, suspicion of trawling activity);
- (iii) Incentives promoting sustainable fishing: valorisation of fisheries products and activity (editing brochures, flyers, standardisation of price display, etc).



[Download presentation](#)

## The Cap Roux fishing reserve: a Marine Protected Area created and managed directly by fishers

Axis 3. Legal frameworks, regulation and control of fishing activities

**Speaker: Leila Seddiki, ACPCR, France & Christian Decugis (AMPAM / LIFE Platform)** - [associa-tioncaproux@gmail.com](mailto:associa-tioncaproux@gmail.com) / [christiandecugis@apampeche.eu](mailto:christiandecugis@apampeche.eu)



The Cap Roux Fishing reserve (Cap Roux AMP) is a 450-hectare marine reserve where all forms of fishing are prohibited. Its particularity is that it was created in 2003 on the initiative of the fishers of the area themselves, anxious to preserve the future of their profession. This decision by the Prud'homie, a specific French authority bringing together all the fishers in an area, was supported by a ministerial decree in 2004.

The Cap Roux Association (ACPCR) is in charge of helping the Prud'homie to promote the Cap Roux MPA. As a pilot site for the FishMPABlue2 project, it was decided to work on two governance tools: enforcing existing regulations, including the project to appoint a sworn guard to strengthen surveillance, and strengthening fishermen's involvement. While most of the measures implemented have been successful, legal and administrative difficulties have so far prevented the sworn guard project from being carried out successfully. Nevertheless, the actions implemented have made it possible to remotivate fishers and bring them together around the MPA. This collaboration must continue.



[Download presentation](#)

## Session conclusions and recommendations

- FishMPABlue2 presented a proposal for a Governance Model, based on project experiences. This involves small-scale fisher involvement in MPA management, strong enforcement of fishery rules, and good monitoring to provide management information, all within the context of the MPA management plan.
- Overall, the governance model was met with approval. Discussion focussed on the legal barriers to enforcement, and the financial barriers to monitoring, enforcement (eg hiring and training local rangers) and various engagement activities.
- Legal barriers to enforcement operated at two levels: the ability of local 'rangers' to impose fines for infringement of rules, and poor coordination between legal instruments for fisheries on the one hand and nature protection on the other. National governments should address these issues as a priority.





# Legal framework for management of fishing activities in Natura 2000 sites

Axis 3. Legal frameworks, regulation and control of fishing activities

**Chair: Fotios Papoulias (European Commission – DG Environment) - [Fotios.Papoulias@ec.europa.eu](mailto:Fotios.Papoulias@ec.europa.eu)**

**Reporter: Melina Markou - [mmarcou@dfmr.moa.gov.cy](mailto:mmarcou@dfmr.moa.gov.cy)**

**Note-taking: Nawel KHELIL - [nawkhelil@gmail.com](mailto:nawkhelil@gmail.com)**

Fishing and harvesting of marine aquatic resources have been identified as the most common “high pressure” activity on habitats and species in marine Natura 2000 sites. The Birds and Habitats Directives set requirements for the management of Natura 2000 sites and for addressing that pressure. In accordance with Article 6 of the Habitats Directive and Article 4 of the Birds Directive, Member States are required to establish conservation measures for Natura 2000 sites designated under those directives (respectively Special Areas of Conservation and Special Protection Areas) in order to prevent the deterioration and disturbance of habitats and species for which the sites are designated and to contribute to reaching their favourable conservation status. These measures involve regulating unsustainable fishing activities, e.g. by restricting certain fisheries or gears. All these legal provisions require a sound governance system with efficient cooperation between nature and fishing authorities, MPA managers and fishers, NGOs and other parties concerned.

This session reviewed the legal framework for managing fishing activities in Natura 2000 sites, the experience so far and methodological approaches for its practical implementation with a focus on small-scale fisheries in Natura 2000 MPAs.

By way of introduction Fotios Papoulias presented the current EU framework for managing fisheries within MPAs/ Natura 2000 areas on the basis of the provisions of the Birds and Habitats Directives and the Common Fisheries Policy. This included an overview of the state of play with the preparation of fishery management measures for the sites, related guidance and other technical documents available from the Commission services and some new policy developments and proposals in the area of financing and fisheries control that are relevant for small-scale fisheries in MPAs.



[Download presentation](#)

## Taking into account professional fishing activities in Natura 2000 sites

Axis 3. Legal frameworks, regulation and control of fishing activities

**Speaker; Sandra Runde-Cariou, French Biodiversity Agency, France - [Sandra.runde-cariou@afbiodiversite.fr](mailto:Sandra.runde-cariou@afbiodiversite.fr)**

In collaboration with the French Biodiversity Agency (AFB), the Mnhn has developed a national method to determine the risk of professional fishing activities to not achieve the conservation objectives of Natura 2000 sites. This method was carried out in consultation with the AFB, the maritime fisheries and aquaculture directorate, and DEB. The method makes it possible to cross fishing grounds with the presence of habitats of Community interest and thus determine the level of risk. Depending on the level of risk, management measures will be developed in consultation with professional fishers.



[Download presentation](#)

# The new legal framework (2018) for Greek MPAs and its consequences on managing fisheries in Natura 2000 marine sites

Axis 3. Legal frameworks, regulation and control of fishing activities

**Speaker: Laurent Sourbès, Zakynthos National Marine Park, Greece - [lsourbes@nmp-zak.org](mailto:lsourbes@nmp-zak.org)**

The recent Law 4519/2018 for the Management Agencies of Protected Areas in Greece, combined with the recent extension of already existing Natura 2000 sites and the establishment of new ones (December 2017), has, as an immediate consequence, the extension of territorial competences of all Management Agencies to all Natura 2000 sites in Greece. Regarding managing fisheries in Natura 2000 marine sites, it implies new responsibilities for Management Agencies that should be compatible with both the general fisheries legislation and the environmental legislation, especially regarding the implementation of the Habitat, the Marine Strategy Framework and Marine Planning Directives. Therefore, the main challenges of MPA management in Greece is now to immediately address issues such as governance, needed material and human resources and the immediate planning and implementation of effective management measures.



[Download presentation](#)

## Measures implemented in the Menorca Channel concerning small-scale fisheries

Axis 3. Legal frameworks, regulation and control of fishing activities

**Speaker: Sandra Mallol, David Díaz and Raquel Goñi, Instituto Español de Oceanografía, Spain - [sandra.mallol@ieo.es](mailto:sandra.mallol@ieo.es)**

During 2009 - 2014 the LIFE+ INDEMARES project analyzed the human uses in the Menorca Channel (Balearic Islands, Spain) to identify overlapping between habitats and fisheries. Fishing activities and their potential impacts on benthic communities were studied, considering both small-scale and bottom trawls fisheries targeting demersal species.

The scientific knowledge compiled has informed recommendations for the management of bottom trawling in the area, resulting in the implementation of two areas closed to trawling. This regulation was adopted due to the presence of sensitive habitats and consequent obligation to comply with Article 4 of the Council Regulation (EC) 1967/2006 (21 December 2006), concerning management measures for the sustainable exploitation of fishery resources in the Mediterranean Sea.

At present there are no regulations implemented for small-scale fisheries but the IEO has conducted studies aimed to improve the selectivity of the trammel net fishery targeting spiny lobster and minimize its potential impacts. Most of the scientific recommendations have been voluntarily adopted by the artisanal fishermen community. These measures focused on changes in the material used in trammel nets and the reduction of soak times.



[Download presentation](#)

## DACOR Project (CORses hAlieutic data) Measure 28 of the EMFF (April 2017-March 2020).

Axis 3. Legal frameworks, regulation and control of fishing activities

**Speaker: Marie-Catherine Santoni & Jean-Michel Culioli Bonifacio Strait Nature Reserve, France) - [Marie-Catherine.Santoni@oec.fr](mailto:Marie-Catherine.Santoni@oec.fr)**

The DACOR project, led by the Corsican Environment Office, is based on a local consortium (OEC, University of Corsica and CPMREM of Corsica). Its objective is to set up a partnership between Small Scale fishers, scientists and managers of protected areas integrating Natura 2000 sites at sea. A strategy for collecting fisheries data that meets the characteristics of Small Scale coastal fishing, integrates interactions with species of community interest and is compatible with the fisheries protocols and databases used in European calls for data. The sustainability of this shared scientific monitoring of the island marine fisheries will allow a better knowledge of the resource and the conservation issues and support for the recognition of the specificity of Mediterranean Small Scale Fisheries.

Funding: EMFF Article 28, Ministry of Agriculture and Food through the Direction if Maritime Fisheries and Aquaculture (DPMA) and the InterRégional Direction of the Mediterranean Sea (DIRM-Med).



[Download presentation](#)

## Session conclusions and recommendations

---

- Cooperation: building trust is absolutely necessary at all the stages of MPA management ( collected data, carry out risk assessment...etc.).
- Lack of 'best' MPA management plan or data should not be a reason to delay action to address imminent threats.
- To put in place a systematic and step by step approach in order to have a good understanding of the ecological value of MPA and leading to its acceptance.
- To broadly apply a well-established risk based approach.
- Good knowledge and understanding of Natura 2000 conservation objectives, as well as awareness of EU fisheries policy framework and funding opportunities are crucial among MPA managers and fisherman communities.



# Anti-poaching strategies for Marine Protected Areas

Axis 3. Legal frameworks, regulation and control of fishing activities

**Chair:** Laurent SOURBÈS, Zakynthos National Marine Park, Greece - [lsourbes@nmp-zak.org](mailto:lsourbes@nmp-zak.org) & Pierre VIGNES, MedPAN Secretariat, France - [pierre.vignes@medpan.org](mailto:pierre.vignes@medpan.org)

**Reporter:** Susan Gallon ([susan.gallon@medpan.org](mailto:susan.gallon@medpan.org)) / Chloë Webster - [vahaolana@gmail.com](mailto:vahaolana@gmail.com)

**Note-taking:** Marta Sostres - [sostres.marta@gmail.com](mailto:sostres.marta@gmail.com)

Illegal fishing undermines marine parks, and can threaten chronically overfished species. Illegal fishing is also a serious threat to small scale fisheries in many parts of the basin. In the survey circulated this year by MedPAN among the Mediterranean MPA community, 67% of respondents indicated that improving the surveillance and control of the sale of illegal fishing catches is at the top of their priorities, whilst 65% of them said they were lacking experience to effectively address this problem. Based on the presentation of case studies showcasing successful strategies, this session aimed to identifying and sharing approaches and tools to combat illegal fishing in MPAs.



[Download presentation](#)

## From MedPAN Project to StaMM: 4 years of monitoring, control and prevention of illegal fishing in the Gaiola Underwater Park

Axis 3. Legal frameworks, regulation and control of fishing activities

**Speaker;** Luca Appolloni, Gaiola Interdisciplinary Study Center, Italy - [luca.appolloni81@gmail.com](mailto:luca.appolloni81@gmail.com) / [m.simeone@areamarinaprotettagaiola.it](mailto:m.simeone@areamarinaprotettagaiola.it)

The Gaiola Underwater Park is a small Marine Protected Area located in Naples (Italy), funded in 2002 in order to preserve the biological and archaeological heritage. In fact, because of the metropolitan context in which it is integrated, the area is subject to constant anthropic pressure, which often results in illegal activities, especially in the fishing sector.

In this work, the results of 4 years of monitoring and control of illegal fishing inside the MPA are presented. This research had an important impulse in 2015, thanks to the collected data and to the methodology developed within the Gaiola MedPAN Small Project. The experience acquired in these years resulted in the funding of the StAMM Project, a permanent station for the monitoring, control and prevention of environmental offences in the MPA.



[Download presentation](#)

## Shared territorial management: a key success factor in the fight against illegal fishing in the Calanques national Park

Axis 3. Legal frameworks, regulation and control of fishing activities

**Speaker:** Patrick Bonhomme - [patrick.bonhomme@calanques-parcnational.fr](mailto:patrick.bonhomme@calanques-parcnational.fr) & Sébastien Mabile [sma-bile@seattle-avocats.fr](mailto:sma-bile@seattle-avocats.fr), Calanques National Park, France

In 2017, a case of illegal fishing outside the norm was revealed. The catches, sold to restaurants and fishmongers in Marseille, came mainly from non-fishing areas. This «coup de filet» is the result of management actions undertaken in the territory over the past several years:

- » a collective work dynamic built with professional and recreational fishers,



- » the development of a comprehensive field monitoring strategy articulated with a clear and effective criminal policy,
- » the strengthening of the skills and specialisation of the actors in the criminal justice system.

Criminal sentences are a strong signal that biodiversity is being taken into account in judicial cases. The ecological damage, estimated at 450,303 euros, will be judged soon, involving the resellers. The success of such operations is now made possible by the dynamics generated by the Calanques National Park.



[Download presentation](#)



## Session conclusions and recommendations

- The use of technologies for monitoring and surveillance (video-surveillance, drones...) is one key element to anti-poaching strategies (especially in large MPAs). However, the presence of teams in the field remains essential.
- Cooperation with authorities and stakeholders (fishers, diving clubs...) is essential to spot illegal activities and ensure the quick response to infringements.
- MPA rangers should be provided with police competencies in order not to only depend on external authorities. In any event close cooperation between MPA and other authorities (joint patrolling, exchange of information, set up of operational group...) is essential to ensure effective response to illegal activities making the best of complementarity of competences.
- Besides the poachers, take into account all the protagonists (accomplice) involved in the illegal activities and benefitting from them (restaurants, fishmongers...).
- Communicate and advertise emblematic successful police or judicial operations in the medias.
- Raise prosecutors' awareness and get them actively involved in the set up of a criminal strategy to provide proportionate and timely responses to illegal activities and environmental offenses (depending on the seriousness of the offense).
- Coordinate at sea and on land control activities.
- Ensure that penalties / sanctions are dissuasive enough.
- Combating poaching is a long term / never ending process.
- Ensure monitoring in order to characterise the environmental prejudice and to calculate the price of the fine (for serious cases).



# Towards 2% of no-take zones in the Mediterranean: acting at the different levels

Axis 3. Legal frameworks, regulation and control of fishing activities

**Chair: Laurent Sourbès (Zakynthos National Marine Park, Greece) & Pierre Vignes (MedPAN Secretariat)**

**Contact:** [lsourbes@nmp-zak.org](mailto:lsourbes@nmp-zak.org) / [pierre.vignes@medpan.org](mailto:pierre.vignes@medpan.org)

**Reporter: Susan Gallon -** [susan.gallon@medpan.org](mailto:susan.gallon@medpan.org) / **Chloë Webster -** [vahaolana@gmail.com](mailto:vahaolana@gmail.com)

**Note-taking: Reda Neveu -** [reda.neveu@medpan.org](mailto:reda.neveu@medpan.org)

The participants in the 2016 Forum of Marine Protected Areas in the Mediterranean (Tangier 2016) updated the Mediterranean MPA Roadmap with key operational and action-oriented recommendations. One of these recommendations is to increase the coverage and implementation of no-entry, no-take and no-fishing zones, within either existing or future MPAs, from the current coverage of 0.04% of the Mediterranean Sea to reach at least 2% by 2020, especially in key functional areas.

This session aimed to share views and ideas on how the MedPAN network together and at all levels can contribute to the achievement of this goal.



[Download presentation](#)

## Can a seasonal no-take zone provide effective protection of fish fauna within an MPA?

Axis 3. Legal frameworks, regulation and control of fishing activities

**Speaker: Charalampos Dimitriadis, Zakynthos National Marine Park, Greece -** [xdimitriadis@marine.aegean.gr](mailto:xdimitriadis@marine.aegean.gr)

Implementation of seasonal no-take zones as part of fisheries management scheme in MPAs is largely unknown despite of their role as a flexible trade-off between human needs and conservation objectives. To this end, the effects of protection level and habitat type on community parameters, trophic structure and functional diversity of fish populations were assessed at sites of different protection level with respect to fisheries (from seasonal no take-zone to areas completely open to fisheries) inside and outside the MPA of the National Marine Park of Zakynthos.



[Download presentation](#)

## Spanish Mediterranean marine reserves - Islas Columbretes Marine Reserve case study

Axis 3. Legal frameworks, regulation and control of fishing activities

**Speaker: Raquel Goñi, Instituto Español de Oceanografía, Spain -** [raquel.goni@ieo.es](mailto:raquel.goni@ieo.es)

The Spanish Mediterranean harbors 21 marine reserves (MR), 17 of which with no-take areas, that have been designated under a variety of national and regional laws. The first was established in 1980 and the newest in 2016. The marine area covered by MRs is 993 km<sup>2</sup> of which 142 km<sup>2</sup>, 14% of the total, is no-take. The fraction of the surface of the Spanish Mediterranean continental shelf that is protected in MRs at less than 100m is 2.3%, and the fraction protected in no-take areas is 0.3%.

The Columbretes Islands MR, designated in 1990, covers 55 km<sup>2</sup> and has a variety of highly restrictive regulations that renders the entire MR de facto no-take. It harbors rock and coralligenous habitats and contiguous fishing grounds from 60 m to 100 m. Of the Small Scale Fisheries operating outside the MR, that of the spiny lobster (*Palínurus elephas*) is the most common and well known, since traditional fishing grounds of the species are protected in

the MR. Studies conducted during the last 20 years in the Columbrete MR have documented the concentration of the fishing effort around the boundaries and that the harvested spillover lobster, that offsets the loss of yield resulting from the reduction of fishing grounds in the MR, produce a mean annual net benefit of 10% of the catch in weight.



[Download presentation](#)

## Consolidation and expansion of No Fishing Zones in Turkey

Axis 3. Legal frameworks, regulation and control of fishing activities

**Speaker: Zafer Kizilkaya, Mediterranean Conservation Society, Turkey** - [kizilkaya.zafer@gmail.com](mailto:kizilkaya.zafer@gmail.com)

The current site is the 30,400ha Gökova Bay SEPA, located in south-western Turkey within which trawling is entirely prohibited, and which includes 3,000ha of 6 existing No Fishing Zones and a 27,600ha ban on purse seine fishing. Mediterranean Conservation Society are the lynchpin, providing both the bulk of enforcement and the main connection to local stakeholders.

Building on the success of the No Fishing Zones designations in Gökova, the government's recent expression of interest in working with MCS to enhance marine management through the designation of additional No Fishing Zones is an important opportunity.

Supported by the Endangered Landscape Programme, the new project aims at establishing a network of No Fishing Zones from Gokova Bay to Cape Gelidonya. It covers 1,720 km of coastline with important coastal and marine resources.



[Download presentation](#)



## Session conclusions and recommendations

- Target key functional areas to establish networks of no-take zones: no-take zones need to focus on ecosystem and not species.
- Permanent no take zones are essential and can be complemented with other measures such as seasonal or temporary closures in adjacent zones within a buffer.
- A minimum size (e.g. 4 Km<sup>2</sup>) should be defined in order to ensure efficiency of NTZ (see reference paper here).
- Don't miss opportunities to designate new no-take zones even though enforcement capacity is not guaranteed yet.
- Enforcement and effective surveillance are however key to ensure the effectiveness of no-take zones.



# Challenges and solutions for the eco-labelling of small-scale fisheries in the Mediterranean

Axis 4. Economic sustainability of small-scale fisheries

**Chair:** Yassine Skandrani (Plateforme Maghrébine de la Pêche Artisanale, Tunisia) - [skandraniyassine1@gmail.com](mailto:skandraniyassine1@gmail.com) & Julio Agujetas (Marine Stewardship Council, Spain) - [julio.agujetas@msc.org](mailto:julio.agujetas@msc.org)

**Reporter:** Lola Canizares - [lola.canizares@medpan.org](mailto:lola.canizares@medpan.org)

**Note-taking:** Aymen ABIDI - [aymabidi@yahoo.fr](mailto:aymabidi@yahoo.fr)

Small scale fishing has an important role in the preservation of cultural heritage and aquatic resources due to selective, ancestral and passive fishing techniques adapted to marine habitats. Small scale fishing creates added value in terms of local development, social and environmental sustainability through its ability to create short distribution channels and provides consumers quality products with greater confidence and ease. In the Mediterranean, small-scale fishing faces challenges related to limited means of action, profitability, competitiveness and market access difficulties in front of industrial and aquaculture products. The objective of this session was to exchange and discuss initiatives for the labelling of fishing methods and products in order to promote mechanisms, certification procedures and costs appropriate for small-scale fishing.



M. Mabari / MedPAN

## Medfish Project: A multi-fishery and participatory approach to move towards sustainable Mediterranean fisheries

Axis 4. Economic sustainability of small-scale fisheries

**Speaker:** Julio Agujetas, Marine Stewardship Council, Spain

The Marine Stewardship Council (MSC) fisheries certification and ecolabelling program is a mechanism for recognizing and rewarding sustainable fishing while incentivizing improvements. When trying to see their sustainable practices recognized, small-scale fisheries face specific challenges. Therefore, MSC has developed a suite of tools, such as pre-assessment projects like Medfish, to ensure small-scale fisheries access to its global program and



associated benefits. Medfish uses MSC's pre-certification tools in a strategic way to engage with multiple small and larger-scale fisheries at the same time, building awareness and bringing together key stakeholders involved in the Mediterranean fishing sector to design a bottom-up approach that helps to improve fishing practices in the region.



[Download presentation](#)

## The artisanal octopus pot fishery in the west of Asturias: An experience of MSC certification on a small-scale fishery

Axis 4. Economic sustainability of small-scale fisheries

**Speaker: Germán Campal, Ceder Navia-Porcía, Spain**

The process and achievements of this initiative was presented. It was born from a small group of artisanal fishermen from the west of Asturias with the support of a FLAG (Fisheries Local Action Group) and is becoming a reference in sustainable management of small-scale fishing. The enhancement of sustainable fishing practices through MSC certification has increased fishermen's incomes and improved control of fishing effort. But working with the MSC certification standards has also generated greater environmental awareness among fishermen. Improved governance is being achieved, with the involvement of the sector in fisheries management and its active participation in scientific campaigns.



[Download presentation](#)

## Club Bleu Artisanal: Appropriate procedures and digital technology for the labelling of Small Scale Fishery products

Axis 4. Economic sustainability of small-scale fisheries

**Speaker: Yassine Skandrani, Maghreb Platform for Small Scale Fishing, Tunisia**

The «Club Bleu Artisanal» label is an initiative designed to promote sustainable Small Scale Fishing, cultural heritage, quality over quantity, and obtain potential better selling prices. It also makes it possible to get collectively organised in response to the market and to raise consumer awareness on the importance of traditional gastronomy that is «good, clean and fair». The association Club Bleu Artisanal has developed simple, low-cost certification procedures and mechanisms adapted to Small Scale Fishing with help desk assistance and access to new technologies («electronic fishing journal», social networks and Android application).



[Download presentation](#)

## The Charfia, a fixed fishery typical of the Kerkennah Islands

Axis 4. Economic sustainability of small-scale fisheries

**Speaker: Hafedh Ben Moussa, Slow Food/cherfia association, Tunisia - [benmoussahafedh@gmail.com](mailto:benmoussahafedh@gmail.com)**

The main economic activities of the Kerkennah Archipelago are subsistence activities. The first of these is fishing, which is practised on an extensive basis and according to secular traditions. The Charfia is the most common fishing method used in Kerkennah. As seafarers, the kerkennians use this fixed fishing technique adapted to the particularities of the environment: a fish trap already used 2,500 years ago by the Phoenicians. Faced with threats to the

ecosystem (illegal fishing, reduction of the resource, use of synthetic polyamide materials, PVC tubes, ferrous materials instead of traditional materials), fishers have engaged in the Slow Food network's approach to raise awareness to these threats among the local fishing community. On the principle of a moral commitment, a memorandum of understanding has been established to safeguard traditional knowledge and the ecosystem.



[Download presentation](#)

## Fishermen of yesterday, today, tomorrow: the recent history of the Lagoon of Orbetello

Axis 4. Economic sustainability of small-scale fisheries

**Speaker: Francesco de Franco** - [francescodefranco@gmail.com](mailto:francescodefranco@gmail.com)

The Orbetello Lagoon is one of the most important wetland of the world and is acknowledged by the RAMSAR convention. Fishing in the lagoon is an ancestral tradition that respects seasonal and climate rhythms. The Orbetello fishermen fishing and breeding gilt-head breams, basses, mullets and eels have their roots not only in local history and traditions, but also in a close link with the lagoon and its natural value. As a result of centuries of gastronomic evolutions, the name «Orbetello fish» is a quality label that was born before current certifications. The fish preservation techniques, traditional recipes, attention given to every phase, from processing to packaging, and good practices of the Orbetello fisheries were acknowledged by the international association Slow Food.



[Download presentation](#)



### Session conclusions and recommendations

- The fishing community must be the project leader, the protagonist of the certification. A good organisation is needed so it's necessary to promote the creation of fishers' organizations in order to facilitate the labelling of small-scale fisheries' products.
- It's important to set long-term objectives.
- Regarding co-management, a governance spaces in which fishermen can work together with the administration must be created in order to facilitate the work of the fishermen and develop a sense of ownership on the management system and its specific measures (thus fostering compliance).
- Based on previous experiences, the work towards environmental sustainability and certification can greatly benefit from the help of technicians (e.g. biologists working either as staff within the fishers' associations or as external consultants) and the collaboration with local environmental NGOs.
- It's necessary to work on the marketing, on financial, technical and managerial support since the beginning of the project. The fishermen could have some problem with this thematics so it's necessary to help them to access subsidies for example. They should work with NGO to identify funds and, additionally, to identify local market actors who could also participate in the project inception and contribute to its progress and support.
- The fishermen must be aware of small-scale and artisanal fishing practices: know the history of this fishery, its evolution, the natural materials that can be used, the impact on the fish stock... The aim is to make them aware of the importance of their fishing methods and practices, as well as the importance of maintaining them and passing them on to future generations. They will then be able to value this.
- Enhance the value of products from small-scale and artisanal fisheries.

- The promotion of the exchange of experience is necessary. This will allow the fishermen to share their experience about: financial aspect (how/where do they find the funds, which are the certification costs per year), the type of eco-label that they have chosen and why, the difficulties they have encountered, the benefits of having this ecolabel, etc. In the end, this is intended to facilitate the process of certification eco-label for other fishermen
- Engagement with research institutions is essential to analyze and complete the information about the impacts on the ecosystem, the sustainability of the fishing activities and their evolution over time.
- Control and monitoring have to be consolidated to be sure that everything is in order, that all the rules are respected and so to keep the ecolabel.
- Continuous improvement is needed.



Photos: M. Mabari / MedPAN

## Principles for a Sustainable Pescatourism

Axis 4. Economic sustainability of small-scale fisheries

**Chair: Marina Gomei (WWF Mediterranean)** - [mgomei@wwfmedpo.org](mailto:mgomei@wwfmedpo.org)

**Note-taking: Lola Canizares** - [lola.canizares@medpan.org](mailto:lola.canizares@medpan.org)

The idea of linking the fishing and tourism sectors to achieve sustainable fishing practices through Sustainable fishing tourism (or pescatourism) has been tested in several Mediterranean countries. The basic philosophy of Sustainable fishing tourism is based on 1) contributing to the recovery of biodiversity and fish, 2) promoting the cultural heritage of artisanal fishing, and 3) ensuring long-term income through business diversification. However, these principles have not been fully addressed. Too often business objectives have been promoted to the detriment of the status of marine resources (such as the promotion of big-game fishing leading to an increase in fishing effort). This session aims at sharing with the MPA community the WWF Principle on Sustainable Fishing Tourism, sharing best practices ongoing in Mediterranean MPAs, discussing lessons learned on replication and up-scaling and contributing to a shared vision on how promote the sustainability of Pescatourism.



[Download presentation](#)

## Revolution: fishing tourism

Axis 4. Economic sustainability of small-scale fisheries

**Speaker: Giusy Donato & Giuseppe Potenzzone, Società Cooperativa I Mancuso, Italy** - [imancuso-messina@gmail.com](mailto:imancuso-messina@gmail.com)

Two sisters that decide to be fishermen and one day understand that if they bring with them some people to show the beauty of nature and the traditional fishing methods, it can change their lives. This is what we have been doing for 6 years. We have chosen sustainability.



[Download presentation](#)

# Jump starting fishing tourism in Croatia – From no interest to adoption in 3 years

Axis 4. Economic sustainability of small-scale fisheries

**Speaker: Mosor Prvan, WWF Adria, Croatia - [mprvan@wwfadria.org](mailto:mprvan@wwfadria.org)**

How to reduce fishing effort and sustain fishers livelihood is the million dollar question. Fishing tourism comes up as the great idea but how does it work in reality? This is the story of the rise, development and potentials of fishing tourism in Croatia with a zoom look into the Lastovo Islands MPA fishers community and their attitude towards this activity.



[Download presentation](#)

# The experience of guided tours to the Tonnarella of Camogli and the fishing tourism in Portofino MPA

Axis 4. Economic sustainability of small-scale fisheries

**Speaker: Valentina Cappanera, Portofino MPA, Italy - [v.cappanera@portofinoamp.it](mailto:v.cappanera@portofinoamp.it)**

The Ligurian coast is not famous for typical fishing tourism; the high average age of fishers and mind sets that are not so open have made it difficult to develop this activity.. Only young fishers occasionally carry out activities with tourists. In this context the example of guided tours to the Tonnarella of Camogli emerges as an activity of ecotourism as well as a signal of a good collaboration between the MPA of Portofino and fishers.



[Download presentation](#)

# Pescatourism between the challenge of the tourist service and the socio-economic perspective of fishing in Algeria

Axis 4. Economic sustainability of small-scale fisheries

**Speaker: Nadia Ramdane, DPRH Jijel, Algeria - [ramdane.nadia4@gmail.com](mailto:ramdane.nadia4@gmail.com)**

At the request of professionals, Pescatourism is one of the objectives of the creation of the MPA of Taza in Jijel, as well as the objective of preserving the activity of artisanal fishing. The implementation procedure resulted in the Executive Decree No. 203-2016 of 25 July 2016, which officially recognizes this activity in Algeria. The Pescatourism activity must be the subject of requests for approval from the maritime transport commissions. But the procedures are long. To date, 4 of the 8 applications for approval have been processed.

In the meantime, reflection and research work has been launched in partnership with the University of Jijel, WWF, the Marco Polo organisation, the Fisheries Directorate of the wilaya of Jijel, the General Directorate for Fisheries and Aquaculture, the Ministry of Agriculture and the National Park of the MPA of Taza to study the prospects for this activity, with the main objective of reducing fishing effort and providing a new source of income for professionals. Finally, marketing studies are also being launched to promote this new eco-tourism service, which must play its part in the socio-economic development of the territories.



[Download presentation](#)



## Session conclusions and recommendations

---

WWF Definition of Pescatourism: “Pescatourism consists in an economic activity run by professional fishers with tourists on board, as fishing activity diversification. This alternative income activity should reduce the fishing effort, achieve sustainable management of fishing resources, and promote the cultural heritage of fishery”. It is based on the following three principles: 1) contribution biodiversity/fish recovery, 2) promotion of the cultural heritage of artisanal fishing, and 3) ensuring long-term income through business diversification.

Recommendations to achieve these principles came out from this Session:

- Define Pescatourism standards for MPAs, easy administrative procedures, and clarify the difference between Pescatourism and taxi-boating.
- Use Pescatourism as a tool to start up co-management and achieve MPA compliance.
- Invest in the new generations of fishers and reduce any potential conflicts within the fishermen community.
- Strengthen the capacity of fishers especially on marketing and communication.
- Develop a solid business plan to achieve long-term economic revenues and build strong connections with the sustainable tourism sector.



Photos: M. Mabari / MedPAN

## MPAs and artificial reefs, complementary management tools?

---

Axis 4. Economic sustainability of small-scale fisheries

**Chair:** Eric Charbonnel - Parc Marin de la Côte Bleue - [charbonnel.eric@parcmarincotebleue.fr](mailto:charbonnel.eric@parcmarincotebleue.fr)

**Reporter:** Susan Gallon - MedPAN - [susan.gallon@medpan.org](mailto:susan.gallon@medpan.org) / Chloë Webster - [vahaolana@gmail.com](mailto:vahaolana@gmail.com)

**Note-taking:** Lola Canizares - [lola.canizares@medpan.org](mailto:lola.canizares@medpan.org)

Marine Protected Areas (MPAs) and artificial reefs (ARs) are increasingly regarded as interesting management measures, in that they contribute to the conservation of ecosystems, the sustainability of fisheries, and because they can be helpful in zoning coastal areas in order to reduce conflicts between users. Artificial reefs, for example, can reduce conflicts between different fishing activities, mainly illegal trawling and Small Scale Fisheries operating with set gears whilst contributing to enhance overexploited fish stocks. Beyond these expected benefits, it is important to appraise whether MPAs and ARs meet managers' objectives.

This session aimed to share experiences within the MedPAN network on how ARs may have contributed to the sustainability of Small Scale Fisheries and MPA efficiency.

# Côte Bleue Marine Park: artificial reefs and protected reserves at the heart of management for 35 years

Axis 4. Economic sustainability of small-scale fisheries

**Speaker: Eric Charbonnel, Parc Marin de la Côte Bleue, France** - [charbonnel.eric@parcmarincote-bleue.fr](mailto:charbonnel.eric@parcmarincote-bleue.fr)

The Côte Bleue Marine Park (PMCB) was one of the precursors in the Mediterranean concerning the deployment of artificial reefs (4.884 m<sup>3</sup> of AR), coupled with 2 protected reserves of 295 ha, where all kinds of fishing activities, scuba diving and mooring are prohibited. For 35 years, the Park used both production reefs (7 types of architecture) and protection reefs (5 types of 326 heavy obstacles) spread along 17.5 km, creating barriers against illegal trawling within the 3 nautical miles limit. Deployment of AR and reserves were used as complementary tools which contributed to support the traditional Small Scale Fisheries and protect both resources and habitats.



[Download presentation](#)

## Life Reef technologies project in Port de la Selva (Cap de Creus, Spain)

Axis 4. Economic sustainability of small-scale fisheries

**Speaker: Marc García-Durán Huet, Underwater Gardens International, Spain** - [marc@underwater-gardens.com](mailto:marc@underwater-gardens.com)

Port de la Selva (Girona, Spain) hosts one of the two Small Scale Fishing communities around the Natural Park of Creus Cap which includes a Marine Protected Area. A local fishers association (Confraria) is currently working with Life Reefs Technologies and ICTA-UAB (Autonomous University of Barcelona) to develop 1000m<sup>2</sup> of artificial reefs designed with Reefhopper technology. The aims of the reefs are to increase local marine biomass, develop new research related to fisheries and recovery of endangered species and habitats, as well as host recreational diving. Additional land facilities will host Biolab and Aquademy to raise awareness about marine life and MPAs.



[Download presentation](#)

## Assessment of 30 years of artificial reef immersions on the Agathoise coast (Agde, Hérault)

Axis 4. Economic sustainability of small-scale fisheries

**Speaker: Reda Neveu, on behalf of Renaud Dupuy de la Grandrive (City of Agde - MPA of the Agathoise Coast, France)** - [renaud.dupuy@ville-agde.fr](mailto:renaud.dupuy@ville-agde.fr)

In the context of a large seaside resort (Cap d'Agde), with an important fishing activity (trawlers and coastal and offshore small scale fisheries) and with the presence of many recreational activities at sea, the city of Agde has immersed for more than 30 years (since 1985) several types of artificial reefs in the MPA of the Agathoise Coast, a Natura 2000 marine site.

The main objective was initially to find solutions to the depletion of the local fishery resource and to support coastal fisheries.

To this primary socio-economic objective have gradually been added objectives to resolve conflicts of use / maritime actors and ecological objectives to preserve marine biodiversity, create new habitats and corridors with natural rock.

Between 1985 and 2009 a total of 429 modules or 4,500 m<sup>3</sup> were submerged for a total of 2.4 million euros.

Rigorous scientific monitoring has been undertaken on physical and biological parameters (diving) as well as by

experimental fisheries with the support of the fishers, based on natural control areas and areas with different types of artificial reefs (nozzles, carpet nozzles, double nozzles, baskets).

The objectives of the first immersions in 1985 and 1995 by the nozzle system were achieved for protection against trawling but a strong burial was observed.

For the immersion in 2009, the most important in terms of volume and new basket-type reefs and which differentiated between protection and production reefs, the objective of supporting professional fishing was achieved. The yield proved to be better with the basket system.

The objective of resolving conflicts of use is partially achieved with a better relationship between professional fishers. However, the relationship need be strengthened with recreational activities (especially recreational fishing) that would require an appropriate management plan.

The objective of preserving and restoring biodiversity has been partially achieved, in particular with the creation of new artificial habitats, with very significant concretion, with a significant production effect on the commercial lobster species and with the creation of ecological corridors in the MPA.

However, better management and protection of artificial reefs would contribute to supporting professional coastal fisheries on the Agathoise coast.

The results show that natural habitats remain the main production areas and that it is necessary to consider natural habitats for the effectiveness of immersion. Artificial reefs are not an isolated system.



[Download presentation](#)



## Session conclusions and recommendations

---

- Conservation should be considered a priority over ecological restoration, as natural areas remain the most important to protect.
- For the most part, the possible negative impacts of artificial reefs can be mitigated by careful planning and appropriate selection of sites, appropriate design and construction materials based both on the purpose of the reef and the oceanographic and ecological conditions at the proposed site.
- Need careful planning for its success with case-specific environmental impact assessment throughout the process and reef monitoring after deployment.
- Artificial reefs can produce biomass, with highest yields than the best natural habitats, but they are not “fish fountain”, and need a management plan.
- Artificial reefs are only a tool and need to be incorporated in the overall strategy of the MPA (Communication and awareness in relation to the stakeholders) and global management of fisheries.
- Need of updated guidelines to be communicated widely.

# National networks: an added value for the management of small scale fisheries in and around MPAs: Spain's Network of Marine Reserves and other MPAs in the Mediterranean

Axis 5. The added value of MPA networks

**Chair:** Silvia Revenga Martínez de Pazos, Juan Carlos Jorquera Gámez & Purificacio Canals

**Contacts:** [srevenga@mapama.es](mailto:srevenga@mapama.es) / [jcgamez@mapama.es](mailto:jcgamez@mapama.es) / [pcanals@tinnet.org](mailto:pcanals@tinnet.org)

**Reporter:** Robert Turk - [robert.turk@zrsvn.si](mailto:robert.turk@zrsvn.si)

**Note-taking:** Reda Neveu - [reda.neveu@medpan.org](mailto:reda.neveu@medpan.org)

National systems and networks of MPAs are very diverse and often unknown. However they play a crucial role in the management of the large majority of MPAs in the Mediterranean and abroad. This session approached two of the Spanish systems dealing with MPAs, and their linkages with small-scale fishing activity:

Marine Reserves managed by the Ministry of Agriculture, Fisheries and Food are a tool for fisheries protection, whose main objectives are the protection, regeneration and enhancement of fisheries resources in order to maintain traditional Small Scale Fisheries so fishers from the area can preserve their traditional way of life.

The Spanish Autonomous Agency of Parks - which hosts among others Cabrera National Park that soon will be enlarged -, has an important role in promoting and harmonizing scientific research in MPAs to support best management; some of their studies are linked to fishing activity in MPAs.



[Download presentation](#)



## Spain's Network of Marine Reserves

Axis 5. The added value of MPA networks

**Speaker:** Silvia Revenga Martínez de Pazos, Juan Carlos Jorquera Gámez, **Secretaría General de Pesca, Spain**

Spanish Marine Reserves for fisheries belong to an administrative network set up through the sectoral fisheries policy 32 years ago. Experience has shown that supporting Small Scale Fisheries (SSF) with this zonal protection benefits not only the enhancement of fisheries resources but many other aspects as well: socio economic conditions, research, as well as governance schemes towards sound marine spatial planning designed to keep a Good Environmental Status where different activities, including SSF, are regulated. Two Marine Reserve case studies, Levante de Mallorca - Cala Ratjada and Cabo de Palos - Islas Hormigas focus on the tight relationship between fishers and managers.

Marine Reserves also show benefits beyond the management of fisheries resource: they play a role in spreading awareness about global impacts in the sea and can be considered as sentinels on global change.

The network has been called upon to promote Spanish Reserves on an international level in events, and projects such as: the MedMPAnet Steering Committee, the 2016 Mediterranean MPA Forum opening session, videos produced by GFCM or SPA/RAC, or EU projects such as CoCoNet, 4 INTERREGs, MMMPA.

# The Spanish National Park Network: its role and the Mediterranean marine nodes

Axis 5. The added value of MPA networks

**Speaker: Pep Amengual, OAPN, Spain - [pamengual@oapn.es](mailto:pamengual@oapn.es)**

OAPN, the Spanish National Park Network includes a Mediterranean node – Cabrera National Park - and directly manages another Mediterranean MPA, Chafarinas Game Reserve. The role of OAPN is to act as a framework of support of the National Parks in Spain. It is not directly involved in their management – National parks are directly managed by the governments of the regions- but it supports aspects of National Park linked to national relevance. OAPN works on the internal coherence of the network in formal aspects as well as on common management issues, scientific research, activities with volunteers, and the international image of the network; it also provides financial support in times of crisis or covers particular investments relevant to the network as a whole. As an example, this presentation highlighted the scientific projects OAPN has financed until now for Cabrera, and present Marine National Parks Ecological Monitoring project, that for Cabrera, for example, produced a bionomic map of the marine area.

## Session conclusions and recommendations

- The network should assure a common baseline for the drafting management plans, including zoning principles, surveillance, legislation etc.
- The network should assure the participation of all stakeholders in the process of drafting management plans, in the development of the different activities in the area and in solving conflicts between different users

# Regional networks of MPA managers. An added value for the management of small scale fisheries.

Axis 5. The added value of MPA networks

**Chair: Coordinator: Purificació CANALS (MedPAN and EU Transatlantic MPA Cooperation Project) - [pcanals@tinet.org](mailto:pcanals@tinet.org)**

**Reporter: Fabio VALLAROLA - [fabiovallarola@gmail.com](mailto:fabiovallarola@gmail.com)**

**Note-taking: Irene Morell - [irene.morell@medpan.org](mailto:irene.morell@medpan.org)**

**Speakers: Georgina Bustamante CaMPAM, USA-Cuba, Marie Romani, MedPAN, France, Laurel Wenzel NAMPAN, Network, Canada – Mexico – USA, Fabio Vallarola, Torre del Cerrano, AdriaPAN/AdriaPAN, Italy, Phénia AFB, France**

The session showed the value and the role of regional networks of MPA managers and their coordination with other networks at different scales (sub-regional, national, thematic, etc.) to accelerate the progress towards Aichi target 11, regarding effective management of MPAs and links with Small Scale Fisheries. Focus on the “Common strategy among different regional and national networks at transatlantic level”, and the potential to enlarge this networking approach worldwide.

1. A sample of actions and activities implemented by the networks was showcased regarding capacity-building & management tools; technical and scientific assessment tools; harmonized monitoring protocols; small projects financing; support to national policy implementation; etc.
2. “Call for joint action by MPA networks of managers” launched during IMPAC4 in Chile, 2017; and the EU Transatlantic MPA networks project. MPA partnership experiences across the Atlantic around marine mammal protection, coastal resilience and common strategy between networks of MPA managers.



- CaMPAM

CaMPAM is the network of MPA managers in the Caribbean. CaMPAM started 10 years ago by an UNEP initiative to support MPA capacity building and develop small grants. There is much experience on small-scale fisheries management within the network. It is also interesting to note that countries launched the Caribbean Challenge Initiative to protect and manage 20% of marine and coastal ecosystems by 2020. Exchanges with MedPAN started since IMPAC3 and continued through the Transatlantic Partnership Initiative. In the future, some exchanges, between MPA managers in the Mediterranean and the Caribbean, could be organized especially on fisheries management.

- MedPAN

MedPAN is the network of MPA managers in the Mediterranean. The network is formalized under an association established under the French law with members (MPA managers) and partners (other organizations contributing to MPAs) and a Secretariat team. On small-scale fisheries, MedPAN adopted different approaches: improving guidelines, promoting scientific information sharing, developing joint recommendations from fishermen and MPA managers to inform decision-making bodies... MedPAN is looking for developing some strong-impact tools such as communication tools on benefits of no-take zones; this could be developed together with other networks (regional, sub-regional, national networks) to have better impact and to spread the message at different levels.

- NAMPAN

NAMPAN is the North American network of MPA managers. It is a network of resource agencies, marine protected areas (MPA) managers, and other relevant experts from the United States, Canada and Mexico. The network started as a project inside the Commission for Environmental Cooperation between the three countries. The network is managed by the NOAA. One main challenges addressed by the network is climate change and they have developed ad'hoc tools to better understand climate change. They also worked on indigenous involvement which implies legal issues related to access to resources.

- AdriaPAN

AdriaPAN is a sub-regional network composed by 34 marine and coastal protected areas in the Adriatic. It is a bottom up network and they celebrated their 10 years. They started as a way to present European project proposals. Torre del Cerrano started the initiative; the coordination of managers is done without formal institutionalization of the network. They are working with a project approach: they shared information and the protected areas express their interests and specific needs in some projects and some of them take then the leadership of project. They are now enlarging the network to the Ionian Sea to better fit the European macro-region. The network is now called ADRION-PAN. They act under the MedPAN umbrella.

- AFB

AFB, the French Biodiversity Agency, acts at national level in France ; the agency is in charge of Natura 2000 marine sites and also promotes Marine Natural Parks. The agency also gives support to MPA managers and fosters exchanges. The Agency supports networks, like MedPAN and the French MPA Forum. They have created the MPA database in the North-Atlantic in collaboration with OSPAR Convention. They support the dynamic of IMPAC Congress and the exchanges among Regional MPA networks. They also support the 2019 ICMMPA5.



[Download presentation](#)

## The EU Transatlantic project: “Towards a transatlantic partnership of MPAs”

Axis 5. The added value of MPA networks

This project aims to bringing together MPA managers and Regional MPA networks at Transatlantic level. The project is designed to stimulate exchange and the sharing of best practice to improve the effective management of MPAs in coastal and offshore areas of the Atlantic. Collaboration was built around three topics: marine mammals, resilience, networks. A strong mobilization was launched during the IUCN World Conservation Congress in Hawaii (2016) and during the IMPAC4 Congress in Chili (2017), with in particular a call for joint action. Concerning collaboration

between networks, a joint strategy was developed and main areas of collaboration were identified:

- Sharing information, knowledge and tools
- Building capacities of MPAs and networks
- Influencing International Policies
- MPA managers and networks financing (a second step of the project will focus on the financial strategy of networks).

## **Session conclusions and recommendations**

---

- Regional Networks and networking at Transatlantic level serve to MPAs managers to work across boundaries on ecological and ecosystem conservation issues. It is important to convince decision-makers to commit to work on transboundary ecological problems, and that networks are a good way to approach those issues.
- By joining forces, the regional MPA networks gather their voices and can pass MPA messages to higher levels and especially at international level.
- When the message reaches local governments from above, it helps MPA managers. Receiving the message from both sides (local and higher level) gives more credibility to the needs raised by the managers. It is important to identify key messages and to spread them through networks (at national, sub-regional, regional, transatlantic levels) and through local MPA managers; so those messages can reach political layers at all levels (from local to international).
- Synergies between regional / sub-regional / national networks and between regional MPA networks are mutually beneficial and will be explored in the near future to keep improving their efficiency (data and information sharing, communication messages, sharing of good practices, fundraising...).

# Sustainable financing of MPAs

Axis 5. The added value of MPA networks

**Chair:** Purificació CANALS, MedPAN and EU Transatlantic MPA Cooperation

**Project** (pcanals@tinet.org),

**Speakers :** Charles Besançon, Conservation Finance Alliance (CFA) ; Aniol ESTEBAN, Marilles Foundation, Spain (aniol.esteban@marilles.org), Romain Renoux, Association pour le financement durable des AMP de Méditerranée (rrenoux@m2pa.org)

**Reporter:** Georges Boulos (georges.boulos@medpan.org)

**Note-taking:** Irene Morell (irene.morell@medpan.org)

Securing long-term reliable funding is one of the main challenges MPAs face today. Solving this challenge and ensuring MPAs fulfil their ecological potential will require coordination at local, national and regional level. It will also require the involvement of multiple players from the public and private sectors as well as the development of innovative funding mechanisms.

This session provided an overview of the funding challenges faced by MPAs in the Mediterranean and abroad; a review of traditional funding sources; it also explored the potential of new funding mechanisms. The session placed a particular emphasis on the need for a coordinated approach from the local and regional level to mobilize resources at international level and the role that MPA networks of managers play in this matter. Findings of the session were taken into consideration in the Common strategy among MPA networks at transatlantic level as well as in MedPAN new financial strategy.



[Download presentation](#)

## International Sources of Funding for MPA Management (CFA)

Axis 5. The added value of MPA networks

**Speaker:** Charles Besançon, Conservation Finance Alliance (CFA)

60-80% of funding for MPAs comes from public resources globally.

In the Mediterranean Region, it is up to 89% from public funds, mainly through European funds, GEF and FFEM. Globally, other interesting source of funding for MPAs are Conservation Trust Funds that are private legally independent institutions; in the Mediterranean, the recently created Association for the Sustainable Financing of Mediterranean MPAs aims to play this role.



[Download presentation](#)

# Association for the sustainable Financing of Mediterranean MPAs

Axis 5. The added value of MPA networks

**Speaker: Romain Renoux, Association pour le financement durable des AMP de Méditerranée (rrenoux@m2pa.org)**

This Association is preparing a new funding mechanism. The idea of the initiative is to move from a short-term to a long-term approach and provide sustainable funding to MPAs to be functional. The association has started to give support to MPAs in North Africa, and it will continue to expand to other MPAs in the Mediterranean.

Some of the partners are France, Monaco, Tunisia, Spain, Morocco, SPA/RAC, the Prince Albert II Foundation, Monaco Oceanic Institute, MedPAN, WWF, IUCN, Conservatoire du Littoral, PIM association, FFEM, GEF, Zoo Basel, Leonardo di Caprio Foundation, Palma Aquarium Foundation.



[Download presentation](#)

## Marilles Foundation

Axis 5. The added value of MPA networks

**Speaker: Aniol ESTEBAN, Marilles Foundation, Spain (aniol.esteban@marilles.org)**

Marilles Foundation started recently in 2017. The Foundation aims at making the Balearic Islands an example to follow in terms of marine conservation, by achieving a good conservation status despite the 15 million visitors each year.

They want to create dialogue among stakeholders and to act as fund for the Balearic Islands.

Their challenge is to increase the public funding and to mobilize the private one for Balearic Islands marine conservation.

They also try to demonstrate how MPAs contribute to socio-economic benefits to convince investment in MPA management.



## Session conclusions and recommendations

- There is a need to balance the project approach (and to ease access of MPAs to those projects like European ones, through multi-MPAs and collaborative approaches) and the need to find sustainable funding sources for MPAs to support maintenance costs over time.
- Sustainable financing mechanisms (such as the association for sustainable financing of MPAs) have to be supported at all levels; examples of such mechanisms can be found in Latin America (RedLAC). There is possibility to establish an endowment fund, where different countries or institutions block a large sum of money and then interests can be used to support costs of several MPAs.
- MPAs need to find new ways of funding, not only through project approach, especially by exploring possible mechanisms and mobilizing people to attract funds from national government but also from tourists and private sector (see also the potential linked with the social responsibility of private companies).
- Promote and support MPA financing needs evaluation, business planning (especially using MedPLAN tool developed in 2014) and fundraising. MedPAN could set up a working group on MPA financing to provide a continuous support to MPAs on the crucial issue of financing. Collaboration between Regional MPA networks could also contribute to get to higher scale for MPA financing.





## Closing session

As the closing session was scheduled for this year just after the discussion sessions, the results of the workshop were presented in a very brief way, in the form of tag clouds showing the recurring ideas that emerged from the discussions.

Susan Gallon (MedPAN Secretariat) took the opportunity of this closing plenary session to share with MPA managers of the network a number of issues, including the mass mortality of *Pinna nobilis* and the nodavirus affecting groupers. She also announced the theme for the next workshop, which will focus on mobile species.

Jorge E. Moreno Pérez (Balearic Government Natural Protected Areas) and María Francisca López cortés (National Park of Cabrera) introduced the participants to the field trip to Cabrera National Park planned on the last day of the workshop.

Christel Georges (Ville de Marseille) and Biljana Aljinovic (IUCN Med) took the floor for a communication on the forthcoming 2020 IUCN World Conservation Congress that will be held in Marseille, France.

Purificacio Canals, the President of MedPAN, closed the workshop by reminding the participants of the challenge of remaining mobilized and continuing the work undertaken on fishing at the network level.



M. Mabari / MedPAN





M. Mabari / MedPAN

**After thanking the participants for their commitment in the discussions, Purificacio Canals closed the session in music with the song «Mediterráneo» by Joan Manuel Serrat**



<https://m.youtube.com/watch?v=YNkcAUA1kw>



Joan Manuel Serrat - Mediterraneo - YouTube

<https://www.youtube.com/watch?v=YNkcAUA1kw>



## Field trip to Cabrera national Park



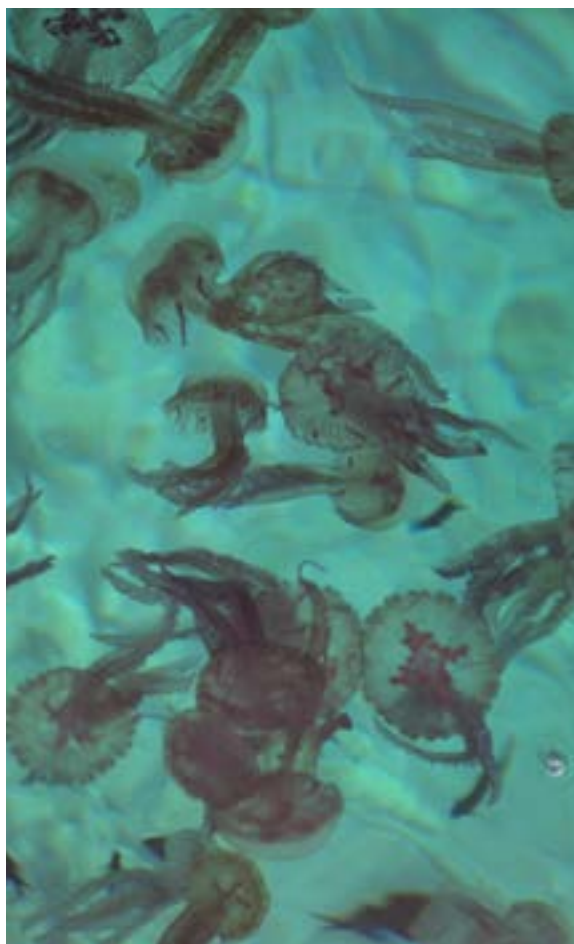
Photos: M. Mabari / MedPAN



A field trip to **Cabrera national Park**, the only Spanish national Park with a marine part in the Mediterranean, was organised on the 3rd day of the workshop. The visit to Cabrera National Park, located one hour away from Palma de Mallorca, provided an opportunity to discuss in situ the management of fishing activities within the park, as well as other topics such as visitor and carrying capacity management and ecological anchorages.

Once on Cabrera, participants had time before lunch to go and explore the territory with a guide. Five hike itineraries were proposed. Participants were split into groups and discovered the castle, the lighthouse, the museum.

2 marine turtles were also released from the Palma Aquarium in which they were healed.



Photos: M. Mabari / MedPAN

# Appendix 1 - Participant List

First Name	Last Name	Organisation	Country	Email
Mouna	ABAAB	WWF North Africa	TUNISIA	mabaab@wwfna.org
Abdennadi	ABARKACH	Haut Commissariat aux Eaux et Forêts et à la lutte contre la désertification	MOROCCO	abdennadi@yahoo.fr
Aymen	ABIDI	Centre de Formation professionnelle à la pêche de Tabarka	TUNISIA	aymabidi@yahoo.fr
Thomas	Abiven	PNPC	France	thomas.abiven@portcros-parcnational.fr
Julio	Agujetas	MSC	Spain	julio.agujetas@msc.org
Biljana	Aljinovic	IUCN Med	SPAIN	Biljana.Aljinovic@iucn.org
Diego	Alvarez-Berastegui	SOCIB	Spain	dalvarez@socib.es
Esteban	Aniol	Marilles	Spain	aniol.esteban@marilles.org
Luca	Appolloni	Centro Studi Interdisciplinare Gaiola onlus	Italy	luca.appolloni81@gmail.com
Yaprak	ARDA	WWF Turkey	TURKEY	yarda@wwf.org.tr
Jordi	Armengol Mas	MedPAN	SPAIN	jordiarmengolmas95@gmail.com
Giannis	Augoustinos	National Marine Park of Zakynthos	GREECE	xdimitriadis@marine.aegean.gr
Anita	BABA I AJDUK	Public Institution for Management of protected areas in Šibenik-Knin County	CROATIA	ababacic@zpv-sibenik.hr
Rigers	BAKIU	Albanian Center for Environmental Protection and Sustainable Development	ALBANIA	bakiurigers@gmail.com
Marcial	Bardolet Richter	IBANAT	Spain	marcialbardolet@gmail.com
Asma	BECHINIA	Parc National d'EL KALA	ALGERIA	asmabe_08@yahoo.fr
Sami	BEN HAJ	Association PIM	TUNISIA	samibenhaj@yahoo.com
Hafedh	Ben Moussa	slow food/association cherfia	TUNISIA	benmoussahafedh@gmail.com
Sajmir	BEQIRAJ	Association for Protection of Aquatic Wildlife of Albania (APAWA)	ALBANIA	s_beqiraj@yahoo.com
Daniela	Bergallo	Freelance	ITALY	daniela.bergallo@alice.it
Charles	BESANCON	Conservation Finance Alliance	US	charles.besancon@gmail.com
Jean-Eudes	BEURET	Laboratoire Agricultures Durables et Développement Territorial	FRANCE	jeaneudesbeuret@gmail.com
Patrick	BONHOMME	Parc national des Calanques	France	patrick.bonhomme@calanques-parcnational.fr
Maria	Bordoy Amengual		SPAIN	
Djamal	Boukhénifra	Prud'homie de Cassis	FRANCE	mjpna@yahoo.fr / sayaoctave@gmail.com
Georges	Boulos	MedPAN Secretariat	FRANCE	georges.boulos@medpan.org
Filip	Bukša	WWF Adria	Croatia	fbuksa@wwfadria.org

Moira	Bursic	Juraj Dobrila University of Pula	Croatia	moira.bursic@gmail.com
Georgina	Bustamante	CaMPAM	USA	gbustamante09@gmail.com
Lydia	B É D O U H È N E WASSILA	Parc national de Taza	ALGERIA	bedouhenewassila@yahoo.com
Antonio	Calò	Université de Nice	FRANCE	antoniocalo.es@gmail.com
German	Campal	Centro de Desarrollo Na- via-Porcía	Spain	julio.agujetas@msc.org
Purificacio	CANALS	MedPAN	SPAIN	pcanals@tinet.org
Maddy	Cancemi			madeleine.cancemi@afbiodiversite.fr
Lola	Canizares	MedPAN	FRANCE	lola.canizares@medpan.org
Valentina	CAPPANERA	Consortium of Manage- ment of Portofino MPA	ITALY	v.cappanera@portofinoamp.it
Maria Pilar	CARABÚS	Montgrí, Illes Medes i el Baix Ter	SPAIN	mcarabus@gencat.cat
Santo	Castorina	LIFE	Italy	italy@lifeplatform.eu
Carlo	Cattano	CONISMA	ITALY	cattancarlo@gmail.com
Agnès	CERDAN	GEG2A	FRANCE	agnes.cerdan@geg2a.org
Eric	CHARBONNEL	Parc Marin de la Côte Bleue	FRANCE	charbonnel.eric@parcmarincote- bleue.fr
Josep	Coll	Tragsatec	SPAIN	jcoll@tragsa.es
Constance	CORBIER-BAR- THAUX	Fonds Français pour l'En- vironnement Mondial	FRANCE	corbier@afd.fr
Jean-Michel	CULIOLI	Office de l'Environnement de Corse / Réserve Natu- relle des Bouches de Bo- nifacio	FRANCE	culioli@oec.fr
Mohammad	DAHER	Tyre Coast Nature Reserve	LEBANON	mohammad.daher@regie.com.lb
Céline	DAMERY	Conservatoire du Littoral	FRANCE	c.damery@conservatoire-du-littoral.fr
Francesco	DE FRANCO	Consortium of Manage- ment of Torre Guaceto	ITALY	francescodefranco@gmail.com
Gabriel	de Labra	Programme DIVECO2	ALGERIA	glabra@aceconsultants.eu
Christian	DECUGIS	LIFE / MedArtnet	FRANCE	christiandecugis@apampeche.eu
Antonio	Di Franco	Université de Nice	FRANCE	difry@libero.it
Manfredi	Di Lorenzo	National Research Council (CNR)	Italy	manfredi.dilorenzo@libero.it
Giusy	Donato	Società Cooperativa I Mancuso	Italy	imancusomessina@gmail.com
Tina	D R A G U T I N BURIĆ	Public Institution for Mana- gement of protected areas in Šibenik-Knin County	CROATIA	tdragutin@zpv-sibenik.hr
Sandro	DUJMOVIC	Brijuni National Park	CROATIA	s.dujmovic@np-brijuni.hr
Renaud	DUPUY DE LA GRANDRIVE	City of Agde - MPA of the Agathoise Coast	FRANCE	renaud.dupuy@ville-agde.fr
Elodie	DURAND	Port Cros National Park	FRANCE	elodie.durand@portcros-parcnatio- nal.fr
David	DÍAZ VIÑOLAS	Instituto Español de Ocea- nografía	SPAIN	david.diaz@ieo.es
Marti	Escudero		SPAIN	
Oscar	Esparza	WWF	SPAIN	oesparza@wwf.es
Margarita	Estapé		SPAIN	marga@interpreting.cat
Carlo	FRANZOSINI	SHORELINE	ITALY	carlo.franzosini@gmail.com



Susan	Gallon	MedPAN Secretariat	FRANCE	susan.gallon@medpan.org
Marc	García-Durán Huet			marc@underwatergardens.com
Jacqueline	GAUTIER DE-BERNARDI	AMPN	MONACO	ampn.monaco@gmail.com
Federico	Gelmi di Caporiacco	Pantelleria - Associazione pescatori Pantelleria	ITALY	federicogelmi3@hotmail.it
Christel	GEORGES	Ville de Marseille	FRANCE	cgeorges@marseille.fr
Marina	GOMEI	WWF Mediterranean	ITALY	MGomei@wwfmedpo.org
Can	Gorgun	Akyaka Fishery Cooperative in Gökova	TURKEY	gorgun.akyaka@gmail.com
Raquel	Goñi	Instituto Español de Oceanografía	SPAIN	raquel.goni@ieo.es
Antonio Maria	Grau Jofre	Es Freus Marine Reserve	SPAIN	agrau@dgpescas.caib.es
Josipa	Grbin	Telaščica Nature Park	Croatia	josipa.grbin@telascica.hr
Emilie	Grimaud	MedPAN Secretariat	FRANCE	emilie.grimaud@medpan.org
Samir	GRIMES	Ecole Nationale Supérieure des Sciences de la Mer et de l'Aménagement du Littoral (ENSSMAL)	ALGERIA	samirgrimes@yahoo.fr
IVAN	GUALA			
Saba	Guellouz	SPA/RAC	TUNISIA	saba.guellouz@spa-rac.org
Julie	Guery	Ville de Marseille	France	jguery@marseille.fr
Agnès	Guittet		SPAIN	agnesguittet@yahoo.fr
Jalal	Halawani	Palm Islands Nature Reserve	LEBANON	jhalwani@ul.edu.lb
Amber	Himes-Cornell	FAO / Fisheries and Aquaculture Policy and Resources Division	ITALY	Amber.HimesCornell@fao.org
Kate	Hogg	WWF Mediterranean	ITALY	khogg@wwfmedpo.org
Hanoch	Ilisar	Yad Hanadiv	ISRAEL	Hanoch@yadhanadiv.org.il
Mohamed	ISSOUAL	Directeur Régional de la région du Haut Atlas Marakech	MOROCCO	issoual2002@yahoo.fr
Coraline	JABOUIN	Parc naturel marin du golfe du Lion / Agence Française pour la Biodiversité	FRANCE	coraline.jabouin@afbiodiversite.fr
Juan Carlos	JORQUERA GAMEZ	Ministry of Agriculture, Food and Environment - General Secretariat of Fisheries	SPAIN	jcjgamez@mapama.es
Messabih	Kada	association peche artisanal «vagues d'or» oran	ALGERIA	messabihkada@yahoo.com
Rezart	Kapedani	National Agency of Protected Areas	ALBANIA	r.kapedani@gmail.com
Charikleia	KARGIOLAKI	Management Agency Karpathos & Saria	GREECE	harkargio@gmail.com
Luka	KASTELIC	Public Institute Landscape Park Strunjan	SLOVENIA	luka.kastelic@gov.si
Tayeb	KERRIS	Parc National de Gouraya	ALGERIA	pngouraya06@gmail.com
Nawel	KHELIL	ENSSMAL	ALGERIA	nawkhell@gmail.com

Zafer	KIZILKAYA	Mediterranean Conservation Society	TURKEY	kizilkaya.zafer@gmail.com
Jerina	KOLITARI	Aquaculture and Fishery Laboratory	ALBANIA	j.kolitari@gmail.com
Patrik	Krstini	WWF Adria	CROATIA	pkrstinic@wwfадria.org
Mohamed	Lamine Baaziz	AMP de Collo / association RHUMMEL UNDE-RWATER	ALGERIA	baazizlamine@gmail.com
Clementine	Laurent	WWF		claurent@wwfmedpo.org
Asllan	Lazemetaj	Fishereman's representative (Vlora bay)	Albania	anilazemetaj51@gmail.com
Javier	Llorente Palao	TRAGSATEC	SPAIN	rmcalaratjada@tragsa.es
Inés	López	COBI (community and biodiversity)	MEXICO	ilopez@cobi.org.mx
María Francisca	López cortés		SPAIN	
Arturo	LÓPEZ ORNAT		SPAIN	arturo@makiwi.net
Faouzi	Maamouri	WWF North Africa	TUNISIA	fmaamouri@wwfna.org
Magali	Mabari	MedPAN Secretariat	FRANCE	magali.mabari@medpan.org
Sébastien	Mabile	Seattle Avocats	France	smabile@seattle-avocats.fr
Samanta	MAKOVAC	Strunjan Landscape Park	SLOVENIA	samanta.makovac@gov.si
Sandra	MALLOL MARTINEZ	Instituto Español de Oceanografía	SPAIN	sandra.mallol@ieo.es
Maria	MANIOPOULOU	HCMR/ Greece	GREECE	mairi.maniopoulou@gmail.com
Melina	MARKOU	Department of Fisheries and Marine Research (DFMR) – Ministry of Agriculture, Natural Resources and Environment	CYPRUS	m.melina82@gmail.com
Phenia	MARRAS - AÏT RAZOUK	Agence Française pour la Biodiversité	FRANCE	phenia.marras@afbiodiversite.fr
Joan	MAYOL	Association PIM	FRANCE	jmayol@dgcpea.caib.es
Sahar Fahmy	MEHANNA	National Institute of Oceanography & Fisheries	EGYPT	sahar_mehanna@yahoo.com
Tatjana	Mehillaj	Regional Administration of Protected Areas, Vlore / Karaburun-Sazani MPA	ALBANIA	tatjanamehillaj@gmail.com
Kada	Messabih	Association dauphin		
Alex	Midlen			alex.midlen@gmail.com
Vladislav	MIHELICIC	Kornati National Park	CROATIA	vladislav.mihelcic@gmail.com
Marco	MILAZZO	CONISMA	ITALY	marco.milazzo@unipa.it
Eyal	Miller	Israel Parks and Nature Authority (INPA)	ISRAEL	ruthy@npa.org.il
Antoni	Mira Sánchez	Direcció General de Pesca i Medi Mari	SPAIN	amira@dgpesca.caib.es
Irene	Morell	MedPAN Secretariat	FRANCE	irene.morell@medpan.org
Rebeca	Moreno Bailén		SPAIN	
Jorge	MORENO PEREZ	Balearic Government Natural Protected Areas. National Park of Cabrera and Natural Park of Eivissa and Formentera salines	SPAIN	jemoreno@dgmambie.caib.es

Gabriel	Morey	TRAGSATEC	SPAIN	morey.gabriel@gmail.com
Deborah	Morrison	Palma Aquarium	SPAIN	
Oliver	Navarro Gil	SEMILLA. GOVERN DE LES ILLES BALEARS	SPAIN	onavarro@semilla-caib.es
Reda	Neveu	MedPAN Secretariat	FRANCE	reda.neveu@medpan.org
Houssine	NIBANI	AGIR (association de gestion intégrée des ressources)	MOROCCO	agirnibani@gmail.com
Maria Del Mar	OTERO	IUCN - Mediterranean Center for Cooperation	SPAIN	mariadelmar.otero@iucn.org
Ahmedou	OULD HAMADI	Parc National du Banc d'Arguin	MAURITANIA	ahmedou.ouldhamadi@yahoo.fr
Christos	Papadas	WWF Greece	GREECE	c.papadas@wwf.gr
Fotios	Papoulias	DG Environnement Belgique		Fotios.Papoulias@ec.europa.eu
Xavier	Pastor		Spain	xavierpastor50@gmail.com
Iuri	Peri	LIFE	ITALY	italy@lifeplatform.eu
Miguel	PETERSEN FERNANDEZ	Ministry of Agriculture, Food and Environment - General Secretariat of Fisheries	SPAIN	bec_sgprp23@mapama.es
Antonis	Petrou	fishermen representative & scientist (marine biologist)	CYPRUS	apmarine@valicom.com.cy
Catherine	PIANTE	WWF France	FRANCE	cpiante@wwf.fr
Giuseppe	potenzone	Società Cooperativa I Mancuso	Italy	imancusomessina@gmail.com
Javier	Pulido	Medarnet ESPAÑA	SPAIN	j.pulido@icab.cat
Mosor	PVRAN	WWF Adria	CROATIA	mprvan@wwfadria.org
Léa	Quittet	Cepralmar	France	quittet@cepralmar.org
Sebastian	Raljevi	fisherman from Telaš ica Nature Park	CROATIA	pkrstinic@wwfadria.org
Nadia	Ramdane	DPRH Jijel	ALGERIA	ramdane.nadia4@gmail.com
Milena	RAMOV	Nature Park Telascica Public Institution	croatia	milena.ramov@telascica.hr
Romain	RENOUX	Association pour le financement durable des AMP de Méditerranée	MONACO	rrenoux@m2pa.org
Silvia	REVENGA MARTINEZ DE PAZOS	Ministry of Agriculture, Food and Environment - General Secretariat of Fisheries	SPAIN	srevenga@mapama.es
Maéva	RINCÉ	Communauté de communes du Golfe de Saint-Tropez	FRANCE	mrince@cc-golfedesainttropez.fr
Marie	Romani	MedPAN Secretariat	FRANCE	marie.romani@medpan.org
Marta	Romeu	University Centre of the Westfjords, Iceland	SPAIN	marta.romeu72@gmail.com
Sandra	RUNDE-CARIOU	Agence Française pour la Biodiversité	FRANCE	Sandra.runde-cariou@afbiodiversite.fr
Rotem	Sade	Israel Nature and Parks Authority	ISRAEL	rotems@npa.org.il






Tatiana	Salaet		SPAIN	tatianasalaet@gmail.com
Sonsoles	SAN ROMAN	University of Malaga - European Topic Centre (ETC-UMA)	SPAIN	sonsolessanroman@uma.es
Luca	Santarossa	Federparchi	ITALY	luca.santarossa@parks.it
Marie-Catherine	SANTONI	Office de l'Environnement de Corse / Réserve Naturelle des Bouches de Bonifacio	FRANCE	Marie-Catherine.Santoni@oec.fr
Leila	SEDDIKI	ACPCR - Association du Cantonement de Pêche du Cap Roux	FRANCE	associationcaproux@gmail.com
Julien	SEMELIN	MAVA Foundation	S W I T Z E R - LAND	julien.semelin@fondationmava.org
Belén	Simarro		SPAIN	bsimarro@telefonica.net
Maurizio	SIMEONE	AMP Parco Sommerso di Gaiola	ITALY	m.simeone@areamarinaprotettaiola.it
Sonja	SISIC	Public Institution "Priroda"	CROATIA	sonja.sisic@ju-priroda.hr
Yassine	SKANDRANI	Plateforme Maghrébine de la Pêche Artisanale	TUNISIA	skandraniyassine1@gmail.com
Francisco Gonzalo	S O B R A D O LLOMPART	Es Freus Marine Reserve / Gen-GOB Eivissa	SPAIN	fransobrado33@hotmail.com
Susanna	Soglia	Freelance	ITALY	susannasoglia@tin.it
Marta	SOSTRES	MedPAN	France	sostres.marta@gmail.com
Ahmed	SOUKI	Notre Grand Bleu	TUNISIA	ahmed.soukingb@gmail.com
Laurent	SOURBES	Zakynthos National Marine Park	GREECE	lsourbes@nmp-zak.org
Marko	Starman	Landscape park Debeli Rti	Slovenia	marko.d.starman@gmail.com
Karlijn	STEINBUSCH	Adessium Foundation	Netherlands	kpws@adessium.org
Togay	Tanyolac	WWF leadership program	Turkey	caloynat@gmail.com
Robert	TURK	Institute of the Republic of Slovenia for Nature Conservation	SLOVENIA	robert.turk@zrsvn.si
Fabio	VALLAROLA	MPA of Torre del Cerrano / ADRIAPAN	ITALY	fabiovallarola@gmail.com
Dusan	VARDA	Mediterranean Center for Environmental Monitoring (MEDCEM)	MONTENE - GRO	vardad@yahoo.com
Stella	VARELTZIDOU	Axios - Loudias - Aliakmonas Management Authority	GREECE	stella.vareltzidou@gmail.com
Pierre	Vignes	MedPAN Secretariat	FRANCE	pierre.vignes@medpan.org
Chloë	Webster	Independent consultant	France	vahaolana@gmail.com
Lauren	Wenzel	NOAA Marine Protected Areas Center	US	Lauren.Wenzel@noaa.gov
Dimitriadis	Xaralambos	National Marine Park of Zakynthos	GREECE	xdimitriadis@marine.aegean.gr
Javier	ZAPATA	Organismo Autónomo Parques Nacionales	SPAIN	jzapata@oapn.es
Samah	ZEILAA	Environment Protection Committee	LEBANON	samahzaylaa@gmail.com

# Appendix 2 - Programme overview

## Monday 12 November

9h00-18h00: <b>MedPAN General Assembly</b> - Room A / Alaró (on invitation)
19h30-21h00: <b>MedPAN social event</b> «Traditional local aperitif» and <b>MedPAN 10th year anniversary</b> - Room A / Alaró

## Tuesday 13 November

8h00 - 8h45	<b>Registrations and welcoming of the participants</b>	Plenary Hall
<b>Joint official opening ceremony</b> <span style="float: right;">The opening ceremony benefits from interpretation:    Remember to bring your ID to borrow a headset!</span>		
9h00 - 9h30	<b>Official welcome &amp; introduction</b> Session hosted by Purificacio Canals, President of MedPAN <ul style="list-style-type: none"> <li>Francina ARMENGOL, President of the Balearic Islands Government - Vicenç VIDAL MATAS, Regional Minister of Environment - Sonia CASTAÑEDA, Director of the Bio-diversity Foundation, Ministry for the Ecological Transition - Fotios PAPOULIAS, DG ENV, European Commission</li> </ul>	Plenary Hall
9h30 - 10h30	<b>Government of the Balearic Islands</b> <ul style="list-style-type: none"> <li>New legislation for conservation of posidonia seabed in the Balearics Islands. Miquel MIR, General Director of Protected Areas and Biodiversity</li> <li>Information, awareness and control campaigns of nautical activity on Balearic's posidonia seagrass 2017/18. Marcial BARDOLET RICHTER. Director of the Project</li> <li>Results of the international workshop on by-catch of Puffinus mauretanicus and other marine birds. Joan MAYOL SERRA, Chief Officer of Balearic Wildlife Service</li> </ul>	
10h30 - 10h45	<b>LIFE IP INTEMARES project</b> , Ignacio Torres, Biodiversity Foundation	
10h45 - 11h05	<b>Marine Protected Areas and Small Scale Fisheries in the Mediterranean.</b> Jean-Michel CULIOLI, Scientific Director of Bonifacio Strait Natural Reserve / OEC, France	
11h05 - 11h25	<b>The marine Natura 2000 network in perspective.</b> Vedran NIKOLIC, DG ENV, European Commission	
12h30 - 14h00	Lunch	Hotel restaurant
<b>MedPAN workshop and FishMPABlue2 Conference experience-sharing sessions</b> <span style="float: right;">The entire workshop benefits from interpretation:   Remember to bring your ID to borrow a headset!</span>		
14h00 - 15h00	<b>Introduction</b> Presentation of the Leadership Forum, Kate HOGG (WWF Mediterranean) - Introduction to the workshop breakout sessions, Pierre VIGNES, MedPAN, France - Presentation of the FishMPABlue2 project, Luca SANTAROSSA, Federparchi, Italy	Plenary Hall
15h00 - 16h30	<b>Workshop breakout sessions</b> - 3 sessions in parallel	Rooms A, B, C
16h30 - 17h00	Coffee break	
17h00 - 18h30	<b>Workshop breakout sessions</b> - 3 sessions in parallel	Rooms A, B, C
18:30 - 20:00	FishMPABlue2 Partners Steering Committee - on invitation	Room C
19h30 - 22h00	<b>Gala Dinner with the marine Natura 2000 Seminar</b>	Palma Aquarium



## Wednesday 14 November

09:00 - 10:30	<b>Workshop breakout sessions</b> - 3 sessions in parallel	ROOM A, B, C
10h30 - 11h00	<i>Coffee break</i>	
11h00 - 12h30	<b>Workshop breakout sessions</b> - 3 sessions in parallel	
12h30 - 14h00	<i>Lunch</i>	Hotel restaurant
14:00 - 15:30	<b>Workshop breakout sessions</b> - 3 sessions in parallel	ROOM A, B, C
15h30 - 16h00	<i>Coffee break</i>	
16:00 - 17:30	<b>Workshop breakout sessions</b> - 3 sessions in parallel	
17:30 - 18:30	<b>Closing session</b> <ul style="list-style-type: none"> <li>Conclusions on the spot - Pierre Vignes &amp; Susan Gallon, MedPAN</li> <li>Work perspectives for the MedPAN network - Pierre Vignes &amp; Susan Gallon, MedPAN</li> <li>2020 IUCN World Conservation Congress - Christel Georges, Ville de Marseille, France</li> <li>Closing address - Purificacio Canals, MedPAN</li> </ul>	Plenary Hall
20:00	<i>Dinner</i>	Hotel restaurant
21:30	Film screening	Room A

## Thursday 15 November

<b>Field trip to Cabrera national Park</b>		9h00-13h00 : (on invitation only) COGITO project Steering Committee - Iberostar Cristina Room Costix
08:30	Departure from Iberostar Cristina by bus	
16:00	Return trip to Iberostar Cristina	
19:00	<b>For Es Freus exchange visit participants only</b> - Departure from Iberostar Cristina to Palma de Mallorca Airport	
20:00	Dinner	

## Friday 16 November - on invitation only

<b>Exchange visit to Es Freus Marine Reserve</b>	
08:30 - 10:00	Meeting with fishers
10:00	Departure by ferry from Ibiza to La Sabina
12:00 - 13:30	Meeting with the Marine reserve staff and with Formentera fisheries representative
13:30 - 15:00	Lunch on the port and meeting with people from Vellmari Association.
15:00 - 17:30	Boat trip

# Appendix 3 - Programme development process

At the beginning of 2018, a questionnaire and call for communications were circulated among Mediterranean MPAs to **assess MPAs priority issues and experience in the management of fishing activities.**

• Which of these fishing related topics (all types of fishing activities) do you consider as priorities for your MPA? In which of these topics is your MPA experienced?

	PRIORITY LEVEL			MPA EXPERIENCE IN THE TOPIC		
	not a priority or low	medium	high	no experience	some experience	good experience
Knowledge and monitoring of fishing activities in your MPA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stakeholders' participation in the fisheries management decision-making process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regulation and control of fishing activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Economic sustainability of small-scale fisheries	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Capacity building and awareness raising of key stakeholders on the management of fishing activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Priority issues and experience assessed under 5 main topic areas.**

## REGULATION AND CONTROL OF FISHING ACTIVITIES

• Which priority actions would need to be implemented in your MPA(s) to improve the regulation and control of fishing activities? Has your MPA(s) some experience already in implementing such actions?

	PRIORITY LEVEL OF ACTIONS TO IMPLEMENT			MPA EXPERIENCE IN IMPLEMENTING SUCH ACTIONS	
	not a priority or low	medium	high	some actions already implemented	no experience
Clarify the governance structures (i.e. roles and responsibilities of different authorities and organizations)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Set limits and quota for fishing licenses (all types) in order to reduce fishing effort inside the MPA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Establish territorial rights to safeguard the fishing efforts of local fishers and limit the entrance of new fishers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase the time and perimeter of surveillance in the MPA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Involve the local fishers in the surveillance activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve the surveillance and control of illegal trawling in coastal waters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve the surveillance and control of illegal sale of recreational fishing catches	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Effectively address poaching and destructive practices affecting marine ecosystems (e.g. dynamite)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Develop specific regulations to support inter-sectoral income-generating activities (e.g. pesca-tourism)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Foster the coordination of national and regional legislation on conservation, fishery and tourism	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**For each of the 5 main topic areas, priority issues and experience assessed under a number of key management measures.**

The steering committee based on the 80 responses and 43 case studies proposals received to develop the workshop discussion sessions.

## CALL FOR COMMUNICATIONS

• Would you like to propose a case study on the management of fishing activities in Marine Protected Areas for presentation in the forthcoming experience-sharing events of the MedPAN network?

Yes

No

Case studies can highlight lessons learned from the viewpoint of successes and/or difficulties experienced in the management of fishing activities in MPAs. The case studies submitted via this call for communications will be reviewed for selection by a Steering Committee.

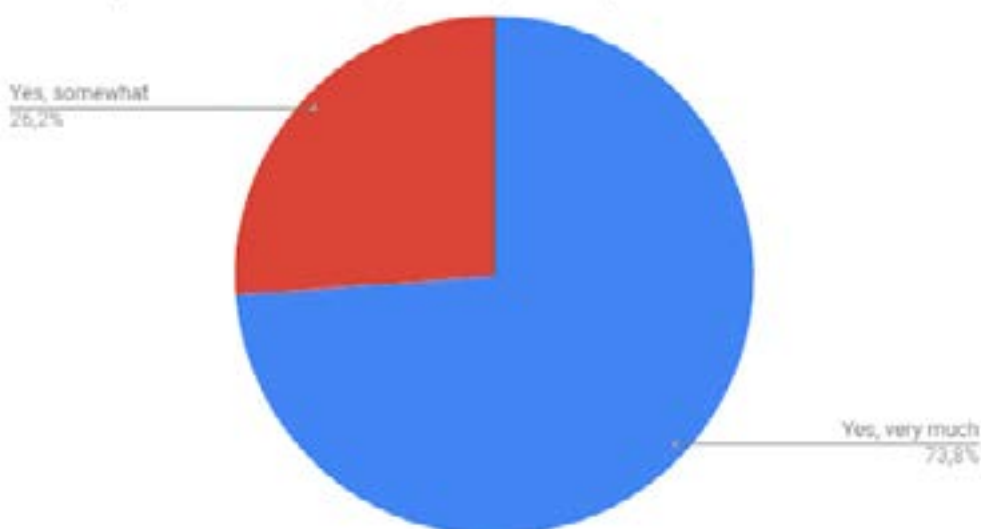
MedPAN joint experience-sharing activities include an exchange visit to Torre Guacota MPA (Italy) in June, a Regional training workshop in Tulum (Mexico) in October, as well as the MedPAN Regional experience-sharing workshop in December (location to be confirmed).

# Appendix 4 - Satisfaction survey

An anonymous satisfaction survey was sent to 170 participants, but only 42 responded. The response rate (24,7%) being really low, the following shared results are therefore not necessarily representative.

This overall assessment of the workshop is exactly the same as that of the 2017 workshop (73% / 27%). It is important to note that none of the participants indicated that the workshop did not

Overall, did this workshop meet your expectations?



meet their expectations (0% for 'no, not very much' and 'no, not at all').

By going into more detail on the assessment of content, the results are more nuanced, as shown in the chart below. Again, almost all the respondents are either satisfied or very satisfied with the different contents of the agenda. However, this year's discussion sessions were less unanimously acclaimed than in 2017, as 38% said they were very satisfied (65% in 2017) and 57% satisfied (34% in 2017).

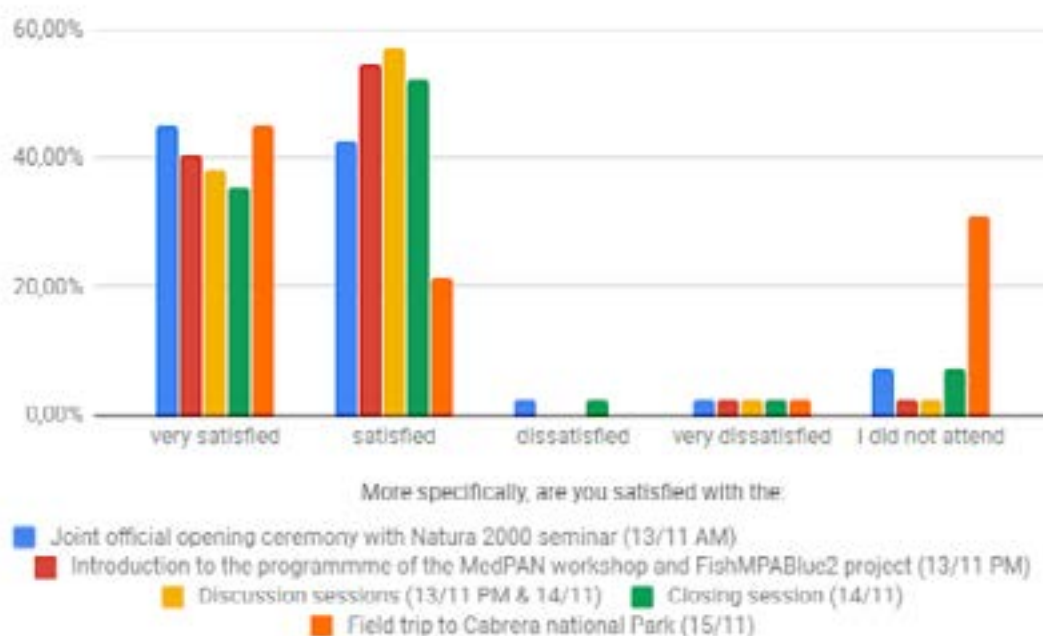
From comments received via this satisfaction survey, this mixed opinion can be explained by the high attendance this year, which limited the interaction time and did not allow for sufficient depth on some topics.

In addition, unlike the subject of the 2017 workshop, which was quite new for MPAs (pollution), the subject of this year's workshop is better known and better understood by MPA managers.

The inevitably repetitive nature of some conclusions and recommendations can create a sense of frustration.

Several comments also highlighted the need to better share the results of the different sessions, which this year was not done due to scheduling constraints for the closing session.

However, it is important to note that, although fisheries is a familiar topic to MPA managers, all respondents felt that the workshop provided them with new knowledge (71% yes, 29% somewhat).



Half of the respondents said that the workshop was an opportunity for them to identify solutions to problems they encounter (somewhat for the other half).

Concerning the organisational and logistical aspects, the level of satisfaction of participants is clearly on the rise compared to that recorded in 2017. There is no doubt that the recruitment of a dedicated position within the MedPAN secretariat explains this very positive result.









---

# The MedPAN collection

The MedPAN collection is a series of tools and user-friendly guidebooks that can provide guidance and build capacity on key issues that managers of Marine Protected Areas (MPA) in the Mediterranean have to confront daily.

The MedPAN collection is fully adapted to the Mediterranean context and is peer reviewed by MPA managers and experts of the region. It gathers tools and guidebooks developed by key players in the Mediterranean under a unified look and feel.

The MedPAN collection is an initiative of several Mediterranean partners, including RAC/SPA, WWF, IUCN Mediterranean, MedPAN, ACCOBAMS, the French MPA Agency and the Conservatoire du Littoral. It is edited by MedPAN, the network of MPA managers in the Mediterranean.

---



The Network of Marine Protected Areas Managers in the Mediterranean

[www.medpan.org](http://www.medpan.org)