

Surveillance and enforcement of regulations in Mediterranean MPAs

A practical guide

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Surveillance and enforcement of regulations in Mediterranean MPAs

Practical guide

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Authors: Arturo López Ornat

With the support of: Pierre Vignes, MedPAN

Reviews: Guillaume Sellier (Port-Cros National Park), Laurent Sourbès (National Marine Park of Zakynthos), Paolo Guidetti (University of Nice Sophia Antipolis), Souha El Asmi et Atef Limam (RAC/SPA), Boris Daniel (Agence des aires marines protégées).

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Partenaires techniques



Regional Activity Centre for Specially Protected Areas

The Regional Activity Centre for Specially Protected Areas (RAC/SPA) was established by the Contracting Parties to the Barcelona Convention and its Protocols in order to assist Mediterranean countries in implementing the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean. Tunisia has been hosting the Centre since its establishment in 1985.

> www.rac-spa.org



Parc national
de Port-Cros

Port-Cros National Park

Established in 1963, the Port-Cros National Park is the pionnier among European Marine Parks, and as of 2001 the first French protected area to become a SPAMI (Specially Protected Area of Mediterranean Importance). Having gained much experience over time and showing constant engagement, the park often takes on an emblematic role in the Mediterranean. By hosting the 2013 Regional experience-sharing workshop of the MedPAN network, the Port-Cros National Park intended to reassert how important surveillance and enforcement are in achieving effective management and in preserving biodiversity.

> www.portcrosparcnational.fr



Agence des aires marines protégées

The Agence des aires marines protégées is a public undertaking created by the law of 14 April 2006 and placed under the governance of the Ministry of Ecology, Sustainable Development and Energy. The main missions of the Agence des aires marines protégées are: supporting public policies for the creation and management of marine protected areas in all French waters, running the MPA network, providing technical and financial support to marine Nature Parks, and strengthening French potential in international negotiations concerning the sea.

> www.aires-marines.fr



National Marine Park of Zakynthos

Zakynthos National Marine Park was created in 1999 with the main objective to protect one of the most important loggerhead sea turtle (*Caretta caretta*) nesting beaches in the Mediterranean while maintaining and developing economic activities in a sustainable way. Integrating the activity of the Park with human activities in the area (construction, port activities, tourism, fishing, and agriculture) is essential to plan a sustainable long-term use of resources. The National Marine Park of Zakynthos is regularly cited as a reference by the European Union for the implementation of the Habitats Directive in Greece and as an example of effective integrated management of coastal zones.

> www.nmp-zak.org

Partenaires financiers



MAVA Foundation

Dr Luc Hoffmann established MAVA in 1994 as an expression of his long personal commitment to conservation. MAVA is a family-led, Swiss-based philanthropic foundation with an exclusive focus on the conservation of biodiversity. Its focal regions are the Alpine Arc and Switzerland, the Mediterranean Basin and Coastal West Africa.

> <http://en.mava-foundation.org>



FFEM - Fonds Français pour l'Environnement Mondial

Working to support French cooperation and development policy for global environmental protection, the Fonds Français pour l'Environnement Mondial (FFEM) provides grants to sustainable development projects in areas relevant to the multilateral agreements on the environment signed by France. The FFEM is an instrument of French cooperation and development policy in the areas of climate change, biodiversity, international waters, land degradation (including desertification and deforestation), persistent organic pollutants and protection of the ozone layer.

> www.ffem.fr



Prince Albert II of Monaco Foundation

In June 2006, HSH Prince Albert II of Monaco decided to establish his Foundation to address our planet's alarming environmental situation. The Prince Albert II of Monaco Foundation is dedicated to the protection of the environment and the promotion of sustainable development on a global scale. The Foundation supports initiatives taken by public and private organizations, in the fields of research and studies, technological innovation and socially-aware practices.

> www.fpa2.com



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> www.aire-marines.fr



PACA Region (Provence Alpes Côte d'Azur)

The Provence-Alpes-Côte d'Azur Region (France) is an elected assembly which manages and exercises powers over its territory particularly in economic and sustainable development matters. The Region is a key partner in projects that contribute both to environmental protection and economic development. It also supports projects that involve the Mediterranean as a whole, assisting economic stakeholders and associations either financially or by providing logistics and technical skills.

> www.regionpaca.fr



Bouches du Rhône General Council

The Bouches du Rhône General Council has been supporting the activities of the MedPAN network since 2013.

> www.cg13.fr



City of Marseille

The city of Marseille has been supporting the activities of the MedPAN network since 2010.

> www.marseille.fr





PART 1

Introduction

Presentation of the guide

This guide aims at supporting MPA managers to improve the surveillance and the enforcement of regulations in their MPAs. It is intended to be a resource document of practical use for MPA managers. It should help them to identify their needs and maximise the efficiency of their actions, adapting to different situations in case of low human resources and financial capacities in particular.

The enforcement of regulations represents much more than just surveillance; it is a cross-cutting issue based on legal frameworks, institutional competencies, management procedures, stakeholders' compliance, information and awareness, local people's perception and behaviour, but also on the available human capacity, equipment-infrastructure, and financial resources.

In order to review this complex subject, MedPAN launched in 2013 a study on the "Surveillance and the enforcement of regulations in Marine Protected Areas in the Mediterranean" focusing on the regional level to identify gaps, best practices, needs and strengths with a view to strengthen the capacity of Mediterranean MPAs in this domain. The study was based on the responses of 54 MPA managers in 15 Mediterranean countries. Its results are included in this guide.

Following this study, the 2013 regional experience-sharing Workshop of the MedPAN network aimed at preparing a support programme to reinforce the capacities of MPA managers in terms of surveillance and enforcement. The workshop was held from 12 to 14 November in Hyères (France), in partnership with Port-Cros National Park that celebrated its 50th anniversary in 2013. The workshop gathered a hundred participants from 16 countries.

The elements of analysis and the recommendations that you will find in this guide are drawn from the study and the experience feedback shared during the workshop.

Most MPAs include terrestrial parts, usually larger than the marine parts and better enforced. Even though this Guide is **mainly focused on the marine part**, it also includes the land-based activities related to surveillance and compliance at sea (public accesses, beach services, fish landings, beach and harbour infrastructures, patrolling of the marine area from land...).

Compliance with regulations is a precondition for the conservation of the marine environment

The use of natural resources should be regulated in a more restrictive way inside an MPA than outside its borders. All interested parties must comply with regulations; this means that users must know the regulations and that the managers must be able to enforce them.

MPAs are established by law, but too frequently are short of the necessary capacities and resources to enforce this law. As a result, when an MPA does not enforce its own regulations:

- It does not reach its own objectives; and perhaps worse still...
- It loses social credibility and the collaboration from its stakeholders.

There are numerous cases around the Mediterranean Sea showing how MPA management wasn't effective until there was enforcement: in the Gökova MPA in Turkey, the lack of surveillance caused poaching and distrust of the local community (see case study workshop proceedings, pp. 33-40); conversely, the well-known co-managed fisheries reserve in Os Miñarzos (Spain) for years had good results for biodiversity and for fishermen, until surveillance was cut down due to budget constraints, leading to conflicts, to the immediate return of illegal activities, and to a deep social distrust. Fishermen who complied justifiably complained that others were breaking the law with impunity.

So surveillance is needed. But marine surveillance is usually the most expensive management activity in an MPA; and it is not the only, not even the most important factor of a good enforcement, since other complementary activities contribute significantly.



Guillaume Sellier
Director of Port-Cros
National Park, France

« The MPA manager must establish a true public action strategy which he implements in partnership with police authorities (including administrative authorities), judicial authorities, professionals (who, in some cases, can be allies), and civil society. For the MPA manager's mission to be legitimate in the eyes of the population and authorities, he must lead a public policy, in a criminal sense, that must differentiate among offenders depending on the seriousness of infringements: that is to say, he must conduct communication, information and educational actions, so as to modify behaviours but also simultaneously conduct police operations, for serious and unanimously reprehensible violations. »

Most cited infringements of MPA regulations

In a questionnaire answered by 54 MPA managers from 15 Mediterranean countries (MedPAN 2013), managers indicated the most frequent infringements of their MPA regulations:

- Recreational fishermen (87%). They may use illegal gears, fish in closed seasons, they sell the catch.
- Artisanal-professional fishermen (82%).
- Marine users coming from outside the MPA (68%): mooring on Posidonia, entering strictly protected areas, and polluting, are the most common infringements.
- Marine-based tourism operators (66%) such as diving centres and tour boats not respecting the zoning, anchoring, or littering regulations.
- Land-based offenses affecting marine ecosystems (53%), mostly pollution.

In general, all these results show very few sub-regional differences.

The main causes for infringement

When MPA managers were asked about the main causes for the offences committed, here is what they reported:

- **Ignorance or misinformation** (33%) particularly for recreational fishermen and private boat owners;
- **Economic interest** (32%) particularly for professional fishermen and boat tour operators;
- **Weak surveillance** (29%) particularly for fishermen;
- **Weak enforcement** (26%) particularly for polluters.
- **General opposition** to the MPA only accounted for 8% of the considerations.

Collaboration of the different stakeholders

MPA managers were asked to consider if the different stakeholders were being affected positively or negatively by the MPA. In general, on a rating scale from -2 to +2, the average impact of MPAs at regional level for all uses is +0.8, so "slightly positive". However, we should keep in mind that managers may not be able to estimate the positive or negative effects of protection on users, or that maybe their perception is different from the opinion of other stakeholders; such questions that address matters with potential conflicts of interest may require a scientific assessment.

Scientists and NGOs are consistently mentioned as the most collaborative and positively affected by the MPAs stakeholders. Other actors positively impacted include diving centres and individual divers, as well as owners of tourist boats, hotels, restaurants and beach services also benefit from the reserve effect (mainly the improved size and reproductive capacity of predator fishes, and the biomass spillover to adjacent waters). Even professional fishermen are impacted positively, not only for increased fish stocks, size and catches, but because effective MPAs in many cases preserve from trawlers, anglers and poachers.

In our sample of 54 Mediterranean MPAs, managers said that the users that sometimes show a general opposition to the MPA are professional and recreational fishermen (in 21% of the MPA answers); following the same study, the users most significantly impacted in a negative way are recreational fishers.

These results depend on the level of cooperation developed with stakeholders. For example, some of them may be informally participating in surveillance; particularly the scientific community that collaborates in 83% of the cases, while professional fishermen (individuals) and diving centres (when existing) also inform about offenders in 50% of the MPAs surveyed.





PART 2

MPA regulation enforcement experience

Better practices and lessons learned

The analysis and recommendations included in this guide are mostly drawn from the 2013 experience exchange workshop of the MedPAN network, devoted to monitoring and enforcement of regulations in Mediterranean MPAs, and the study carried out ahead of the workshop. Held from 12 to 14 November 2013 in Hyères (France), in partnership with Port-Cros National Park, the workshop gathered a hundred participants from 16 countries on this topic. The study was based on the responses given by 54 MPA managers in 15 Mediterranean countries.

These recommendations refer to discussion sessions introduced by case studies on specific MPAs during the workshop. You'll find an account of these discussions in the workshop proceedings :

<http://www.medpan.org/documents/10180/0/Proceedings+of+the+2013+MedPAN+experience+exchange+workshop/424333bb-941d-4c21-af40-35a9798968e2>

1. Political support

In most Mediterranean countries, MPA law enforcement is a relatively recent activity.

- At the local level, policy makers may not always support MPAs until they bring visible benefits and that a risk of social opposition remains; but without political support police authorities are not encouraged to enforce rules, which in turn may cause the MPA not to yield its benefits.
- At the national level, the surveillance and the enforcement of regulation in MPAs are often overshadowed by other national priorities, such as immigration control, drugs trafficking and crime which request the intervention of the coast guard and other police and judicial authorities (see case studies from France, Turkey and Spain in the workshop proceedings, p. 25, 34).
- In countries with strong social unrest, the climate of insecurity and political instability hinders an effective law and regulation enforcement; laws may be violated on a daily basis and it is difficult, in this context, to convince people of the MPA's legitimacy (see case studies from Lebanon and Libya in the workshop proceedings, p. 62-63).



RECOMMENDATIONS

An exemplary MPA: Propose your MPA as a model for the national system, or as a part of your country's international agreements and commitments: Barcelona Convention, Ramsar Convention, the Convention on Biological Diversity (CBD), the African-Eurasian Water Birds Migratory Agreement (AEWA), the Agreement on Conservation of Cetaceans (ACCOBAMS) or other.

- Tyre Coast Nature Reserve (Lebanon)
- Palm Islands Nature Reserve (Lebanon)

Mobilise public opinion for influencing local policies: public/voter awareness, schools (future voters), give media coverage and communicate on the cleaning of beaches to let people see what is happening in sometimes remote MPAs...

- Posidonia of Cap d'Agde MPA (France)
- Calanques National Park (France)

Prepare convincing scientific arguments to take political lobbying actions (socioeconomic studies for example) and to influence a change in the law to ensure a better protection of the marine resources and habitat.

- Telašćica Nature Park (Croatia)



**Jean-Marie
Dominici**
Natural Reserve of
Scandola, France

« In France, an MPA manager usually benefits from a structured political and legal framework. In other words, when a manager calls upon the prosecutor or the maritime affairs, he has the Law and the State's will behind him, which facilitates the formalisation of agreements to implement relevant management policies. »

2. Legal development and MPAs regulation



Laurent Sourbès
Associate Director of
the National Marine
Park of Zakynthos,
Greece

« To be applicable, a law must be consistent with the main management objectives of the MPA and clearly formulated. Some measures have the right intention, but are not adapted to the realities found on the ground. A legislative framework which is too rigid, complex or unusually coercive is inapplicable, which tends to undermine the simple and effective actions that could be undertaken. »

Previous assessments in the Mediterranean found that in some countries the laws on protected areas do not specifically address MARINE protected area needs, and show confusion of competency or fragmentation of responsibilities in the enforcement of regulations in MPAs.

Marine conservation is in many ways a new legal question. For example, many EU countries still lack a legal provision allowing to sanction the impacts on Posidonia meadows. Other countries do not have the legal means to regulate anchoring (case study of the MPCA of La Galite, Tunisia, workshop proceedings, p. 87).

A comprehensive study (MedPAN 2013) found that Mediterranean MPAs have a specific legal status - different from that of terrestrial protected areas - in only 3 of the 15 countries surveyed (Spain, France, Italy). For example, the marine zoning established by the MPA authority may not be legally recognised by other authorities with competences in the marine area (e.g. fisheries, transport, or tourism).

Specific marine regulations developed in Mediterranean MPAs mainly concern professional fisheries and recreational marine activities. They are thus different - and generally stricter - than the already existing marine sector-specific legislation. These MPA regulations more rarely cover transportation (28% of the cases), aquaculture (25%), seabed exploitation (28%), pollution or noise (18%).

In most cases, MPA regulations and zoning are recognised by other institutions with competences at sea (such as fisheries, transport, and public works). It happens nevertheless that MPAs have an integrated management plan that does not rule over other institutions' regulatory measures, whose legal frameworks may even be contradictory (case study from Telašćica Nature Park, Croatia, workshop proceedings, pp. 67-68).

Also, it is important that MPA managers stay up to date with changes in the legal and regulatory framework applicable to the maritime domain, and that they share such information with relevant authorities. After regulatory changes, the guards may need to receive regular training (see the case of Bouches de Bonifacio Strait Nature Reserve, workshop proceedings, p. 45-46).

CASE STUDY

Bonifacio Strait Nature Reserve (R.N.B.B.)

A good cooperation between the R.N.B.B.'s rangers and legal unit, reinforced by a constant collaboration with relevant administrations, ensures a good level of responsiveness to new problems encountered in the field («beach parties» organised on the public maritime domain of the Reserve, use of recreational submarines...). One of the keys to reacting quickly to new threats lies in the knowledge of the applicable legal and regulatory framework.

In view of this, the R.N.B.B.'s legal unit has developed an IT tool to record all regulations applicable in the Reserve, to follow-up on the proceedings initiated in the Reserve (statements, fines, warnings), and to manage the commissioning of the rangers. The rangers also have plastic covered thematic factsheets that detail the powers they are given as well as all the applicable laws and regulations.

Extract from the proceedings of the 2013 regional exchange of experience workshop of the MedPAN network.



RECOMMENDATIONS

Stay up to date on changes in the Law and regulations:

Keep an eye on any changes in the Law and regulations (do not overlook general legislation which may exceed the scope of the MPA, but must be applied if applicable in the maritime domain of the country concerned) and give this information to the relevant agents.

- *National Marine Park of Zakynthos (Greece)*
- *Bonifacio Strait Nature Reserve (France)*

Identify other existing laws: Rely on all other laws in your country applicable to the marine environment (e.g. fisheries or transportation). EU countries can particularly rely on European Directives and on the obligations imposed by Community regulations.

- *Brijuni National Park (Croatia)*
- *Telašćica Nature Park (Croatia)*
- *Côte Bleue Marine Park (France)*

Strengthen your MPA's legislation: Related to MPAs legislation under development, promote the interest of a clear legislative framework to prevent overlapping jurisdiction and give managers a legal authority for granting permissions for fishing activities and tourism within the MPA.

- *Farwa Lagoon MPA (Libya)*

Simple regulations: Start with simple, logic and understandable regulations, which are fair for the user and based on traditional knowledge. Make them openly known to the users.

- *Cabrera National Park (Spain)*
- *Côte Bleue Marine Park (France)*

Avoid creating expectations that you may not be able to fulfill. Avoid excessively long processes to establish any new regulations

Éviter les processus trop longs pour l'établissement de nouvelles réglementations.

- *Telašćica Nature Park (Croatia)*
- *Isole Tremiti MPA (Italy)*

Comply with your own rules: If you claim to apply the law, you must comply to it too (e.g. mooring). But be careful when you set rules that you cannot enforce, because it will encourage a sense of impunity.

- *Cabrera National Park (Spain)*
- *Zakynthos National Marine Park (Greece)*

Prioritise your actions: You may not have the resources or capacities to enforce all the rules; prioritise your actions, considering specific identified issues to be immediately addressed and giving priority to those that can easily be enforced, according to your own capacities.

- *Cabrera National Park (Spain)*
- *Gökova SEPA (Turkey)*
- *La Galite MCPA (Tunisia)*

Support management measures and regulations by scientific monitoring: Scientific monitoring is fundamental for an effective implementation of regulations and management measures: it ensures the legitimacy and the consistency of the enforced regulations and management measures; it enables to validate or invalidate actions in the field.

- *Zakynthos National Marine Park (Greece)*

Make closed lists of allowed fishing boats (e.g. longstanding fishers in the area).

- *Cabrera National Park (Spain)*
- *Gökova SEPA (Turkey)*
- *La Galite MCPA (Tunisia)*

Recreational fishing: Do not underestimate its impact; a maximum catch of 5 kg/day is used in some MPAs; recreational fishing catches should not be sold.

- *Bonifacio Strait Nature Reserve (France)*
- *Côte Bleue Marine Park (France)*
- *Cabrera National Park (Spain)*

Mark the fish: when a fish is caught, recreational fishers must cut the caudal fin which makes it easily recognisable if being sold.

- *Port-Cros National Park (France)*

3. Institutional and operational coordination



Jorge E. Moreno Perez
Directeur du Parc
national de Cabrera

« The Spanish National Parks' governance incorporates a participatory approach by giving an important role to Advisory Committees. Cabrera's Advisory Committee is composed of 21 members who annually give their opinion on the balance sheet and the Park's activity projects. The Ministry may take final decisions; however, in 24 years not a single decision was taken against the Council agreement. »*

(*) representatives of the regional administration, of the State, local administration, municipality of Majorca, scientific authorities, NGOs, fishermen representative, police (Guardia Civil, representative, Chairman, director of the Park, and Park's guard representative

There is a competence ambiguity and a fragmentation of responsibilities related to the enforcement of regulations in many MPAs.

In the Mediterranean, MPA authorities are to some extent directly competent (or at least consulted) in issuing permits or licenses, essentially for scientific research (78%), for local fisheries (58%), for diving activities (55%) and for recreational fishing (45%). The control and follow-up of activities such as aquaculture, transportation, water pollution from boats or land-based resources, transport of hazardous substances, are seldom assigned to the MPA management authority. The authorisation and control of these activities therefore fall within the competence of sectorial authorities.

Sometimes, different administrations are responsible for environmental issues on land and at sea (see case of Al Hoceima National Park, in the workshop proceedings, p. 53).

Given the dispersion of competences for the enforcement of regulations in their marine part, over 60% of Mediterranean MPAs are seeking to rely on cooperation with other institutions with competences at sea, by establishing a formal coordination body (see case study from Cabrera National Park in the workshop proceedings, p. 28).

Moreover, in most Mediterranean countries, MPA rangers can register the offences but have no authority to board vessels, to confiscate equipment, or to prosecute offenders. In Mediterranean MPAs, the recording of infringements is the competence of three authorities on average, whilst prosecution and penalisation fall within the competence of two different authorities that are usually not related to the environment.

Whether or not the MPA has police powers, it is essential that cooperation is materialised on the ground via an effective operational coordination (see case studies from Brijuni National Park pp. 21-26, Port-Cros National Park pp. 89-90, Isole Tremiti MPA pp. 80, 84, National Marine Park of Zakynthos pp. 15-16, in the workshop proceedings).

Some Mediterranean MPAs (42%) have therefore established written agreements – either with the coast guard, the police, or the fisheries authorities – in order to coordinate the enforcement of marine regulations. There are many successful experiences of coordination for marine surveillance and prosecution procedures (see case studies from Bonifacio Strait Nature Reserve pp. 46-47, Brijuni National Park p. 22-24, Côte Bleue Marine Park p. 54, Port-Cros National Park p. 25, 89, National Marine Park of Zakynthos p. 15-16, in the workshop proceedings).

Even if conventions are important insofar as they are a way of maintaining collaboration between administrations in order to cope with changes in interlocutors, the different testimonies agree with the fact that it is the quality of the human relationships that enable to cross the cultural boundaries between administrations and to establish effective cooperation. Another obstacle in developing a well organised co-operation between relevant authorities is the lack of knowledge related to the current laws applicable to MPAs (see case study from Telaščica Nature Park, in the workshop proceedings, p. 70).



RECOMMENDATIONS

With institutions: the control of marine activities is the responsibility of different institutions. The MPA management should not be confined to the action of its management body, but should be better integrated into the operations of the different institutions that have competences on the matter.

- *Brijuni National Park (Croatia)*
- *Port-Cros National Park (France)*
- *Isole Tremiti MPA (Italy)*
- *Marine National Park of Zakynthos (Greece)*

With authorities that have police power at sea: Co-ordinated action for the MPA's surveillance and enforcement must be promoted with the other authorities that have police power at sea (police, coast guard, fisheries inspection...)

- *Bonifacio Strait Nature Reserve (France)*
- *Brijuni National Park (Croatia)*
- *Côte Bleue Marine Park (France)*
- *Port-Cros National Park (France)*
- *Zakynthos National Marine Park (Greece)*



Develop a coordinated action strategy between the competent authorities and the courts (for example to fight against poaching or, with the help of the State, against the illegal activities of large fishing vessels).

- *Brijuni National Park (Croatia)*
- *Telašćica Nature Park (Croatia)*
- *Port-Cros National Park (France)*

Verbal agreement and informal coordination work well; but many MPAs underline the importance to move into a more structured approach (e.g. written agreements, MOU).

- *Brijuni National Park (Croatia)*
- *Telašćica Nature Park (Croatia);*
- *Port-Cros National Park (France)*

In the official nautical charts, include the MPA borders and also mark the Posidonia, Maerl or other protected habitats as no-mooring sites

- *Marine Reserves in Spain*

With stakeholders: Even if the Ministry or the MPA authority ultimately makes the final decision, management measures should be shared and coordinated within Advisory Committees.

- *Cabrera National Park (Spain)*
- *Isole Tremiti MPA. (Italy)*

Develop and adopt a Management Plan together with the institutions and Advisory Committee. It is a strategic document devised in consultation with the stakeholders to provide all the MPA activities for the next years.

- *Telašćica Nature Park (Croatia)*

Keep in mind that the quality of human relationships is a necessary condition to the development of an effective cooperation: you should determine, as an MPA manager, what you can bring to the other authorities for their own interests, in order to motivate their participation in your mission. Also, inviting these authorities to field trips, celebrations, or distributing calendars at the end of the year, are all little things that often make the difference.

- *Brijuni National Park (Croatia)*
- *Port-Cros National Park (France)*
- *Scandola Natural Reserve (France)*

Brijuni National Park (Croatia) and other Mediterranean MPAs

Despite a permanent surveillance activity carried out by the National Park's guards who have two boats at their disposal as well as a video surveillance system, it is not easy to ensure the protection of the marine environment against illegal activities.

Given the Brijuni National Park's proximity to the mainland, its archipelago layout, fines which are an ineffective deterrent, as well as collusion, it is especially very difficult to deal with illegal fishing.

The National Park's resources and powers are insufficient, so it is therefore essential for the Park to rely on other authorities who have the jurisdiction to intervene, namely the police, fisheries inspection, the port authority and the army. The Law for the Protection of Nature (OG 80/13) defines various cooperative measures between these players and protected areas, but they are sometimes inadequate or redundant with other laws and can be interpreted differently. A formal document certifying coordination is always better for a public institution, but congenial communication, understanding and regular exchanges often facilitates mutual coordination.

Although this coordination is unofficial, it brings solutions on several levels: In terms of surveillance, with fisheries inspection and police patrols for example but also on a judicial level with standardised and secured prosecution processes carried out by the police to ensure that offenders are brought before a judge.

It is thus of course preferable that cooperation lies within a formal framework, but it is not always possible or successful: in Croatia, the reason why inter-institutional coordination is not formalised in the management plan is because the management plan has no legal value: «if we decide, for example, to create a no-take zone, this will be explicitly mentioned in the management plan. However, if fishermen violate this area, it will only be possible to prosecute them by applying other laws. The management plan itself is not recognised by the Law.» (Sandro Dujmović, Director of Brijuni National Park).

On a Mediterranean level, the situation can of course be very different from one country to another. As Giuseppe Di Carlo (WWF Mediterranean) observed, «many Mediterranean countries simply do not have a structured policy and legislative framework enabling to implement a management system and regulations in MPAs. Others have a clear legislative framework, but do not have a structured operational one. Italy, for example, falls into this second category: we have specific laws which provide the appropriate jurisdictions and applicable fines, but there is a significant disconnection between the Law and the means available to apply it.»

On a regional level, few countries have both a legal and an operational framework sufficiently structured to institutionalise the coordination of relevant authorities in the implementation of the management system and regulations in MPAs. Hence, Sandro Dujmović pragmatic recommendation to «do one's best» depending on the local situation. Whether cooperation is formal, informal, or a bit of both, the point is that it guarantees efficiency.

Extract from the proceedings of the 2013 regional exchange of experience workshop of the MedPAN network.



4. Control and monitoring of activities



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Many MPAs make lists of the boats (either professional fishers or tourist services) which are accepted inside the protected area and/or issue special permits for allowed users. These practices are highly recommended by most MPA managers (for example see the cases of Alonissos and Northern Sporades National Marine Park p. 77, and Bonifacio Strait Nature Reserve p. 44, in the workshop proceedings).

To register fish catches, most MPA use the landing data declared by professional fishermen; this data are usually unreliable, frequently declaring less than half the catches, especially when dealing with species with high market prices (Lopez-Ornat *et al.* 2014). The records are far more reliable when fishermen are guaranteed that their data will remain confidential and will only be used for scientific purposes (see the cases of Cabrera National Park pp. 29-30 and of Côte Bleue Marine Park p. 51 in the workshop proceedings). Generally, participatory MPAs improve the reliability of fishing records, particularly if data are used to adapt and improve fishing regulations; however, the best data are obtained by scientists on board or weighting catches at the landing point.

It is far more complex to obtain data from recreational fishermen, which in many parts of the Mediterranean are much more numerous and all together may fish as much as professional fishermen in the coastal zone. Recreational fishermen are for the most part not organised in associations or being controlled as the professional fishermen, they do not necessarily declare their catches, which are frequently illegally sold; some poachers become real professionals, and are rejected by fishermen as unfair competition; they poach by night and spearfish. They also frequently do not know well the regulations applicable to the MPA (see the cases of Cabrera National Park p. 30 and of Côte Bleue Marine Park p. 55 in the workshop proceedings).



RECOMMENDATIONS

Census: many MPAs make lists of the boats which are accepted inside the protected area (either professional fishers or tourist services) and/or issue special permits for allowed users.

- *Alonnisos and Northern Sporades National Marine Park (Greece)*
- *Bonifacio Strait Nature Reserve (France)*
- *Cabrera National de Park (Spain)*

Fishing recording by fishermen: the daily catch from professional fishermen can only be trusted if there is mutual confidence; the best approach is to guarantee that fishermen's data would remain confidential and only used for scientific monitoring purposes (not for taxes); it is also important to inform and explain to fishermen organisations about the results of registrations and of monitoring.

- *Cabrera National Park (Spain)*
- *Côte Bleue Marine Park (France)*
- *Os Miñarzos (Spain)*

Fish catches recording by scientists: the best data on professional fishing are obtained by scientists either on board, or sampling the landings at the harbour

- *Os Miñarzos (Spain)*
- *Cabo De Palos - Islas Hormigas Marine Reserve (Spain)*
- *Torre Guaceto MPA (Italy)*

Permits: Some MPAs issue recreational fishing or diving permits, and other admission fees. It enables to strongly monitor the uses, but it also helps self-financing.

- *Bonifacio Strait Nature Reserve (France)*
- *Telašćica Nature Park (Croatia)*
- *Brijuni National Park (Croatia)*

Set conditions: Tour-boat companies or diving centres get 1-year concession permits conditioned to the respect of all MPA regulations and to a maximum number of visitors/day.

- Companies owing such concessions may be asked for a deposit to cover eventual fines and incidences;
 - Infringing MPA regulations translates into the invalidation of the concession permit over the next year.
- *Cabrera National Park*
 - *Cabo De Palos - Islas Hormigas Marine Reserve (Spain)*

Internet reservations: mooring buoys are reserved through the webpage; when done, the applicants press the button "I commit to comply with MPA regulations"

- *Cabrera National Park*
- *Cabo De Palos - Islas Hormigas Marine Reserve (Spain)*
- *Bonifacio Strait Nature Reserve (France)*



5. Surveillance patrols

The lack of surveillance always causes poaching and social distrust about MPAs. Experience shows that MPAs should establish priorities and not spare efforts in trying to enforce what they have limited capacity for (see the cases of Cabrera National Park p. 29 and Zakynthos National Marine Park pp. 13 in the workshop proceedings).



Marine patrolling in Mediterranean MPAs is limited by the low budgets and low number of staff. Surveillance staff is considered “insufficient” in European MPAs, and “insufficient” or even “inexistent” in the rest of the region (cases of Lebanon p. 62, Spain pp. 17, 19, Italy pp. 25-26, or Tunisia p. 88 in the workshop proceedings). **In fact, when asked about surveillance capacities, only 6 out of 45 MPAs consider it sufficient.**

In this situation, many MPAs have established agreements or coordinated actions with other competent authorities, in general the coast guard, police, and fisheries inspectorate. Good examples of this collaboration may be found in Brijuni National Park, Côte Bleue Marine Park, Port-Cros National Park, Zakynthos and Aonissos and Northern Sporades National Marine Parks (see these cases in the workshop proceedings). Some managers among these MPAs consider that joint patrols show more efficiency in terms of rapid response, and also enable to combine information and appropriate sanction.

Other field practices, like making the best of surveillance from land or using technologies, can make surveillance cheaper and more effective.

Often combined with technologies available to the general public (in particular digital cameras), the GPS is cited as the most common equipment in MPAs, probably due to the fact that this technology is affordable. Next come in order: safety equipment, land vehicles, boats/engines. **However, everywhere, except in some EU countries, this equipment is considered “insufficient”.**

Surveillance technology such as radars, small-vessel identification systems, night vision equipment is virtually inexistent in most MPAs and remains insufficient in European MPAs. However, they are extremely helpful; automatic radio-AIS systems, for example, can identify all small boats and record their position and movements.

Many MPA managers emphasise the usefulness of digital cameras: a camera ready to film is as effective as a weapon ready to be fired; when guards are not sworn-in, in some countries they can produce juridical evidence through geo-referenced photos and video (see the cases of Gökova SEPA p. 39, Mauritania p. 39, and Spain p. 17 in the workshop proceedings).



Laurent Sourbès
Associate Director of
the National Marine
Park of Zakynthos,
Greece

« Given the constraints of surveillance at sea (weather, high costs, inability to have boats available at any time, distance...), effective surveillance generally involves sea-based but also land-based means. Thus, in Zakynthos, the guards patrolling the beaches also monitor the marine area. When they identify a violation of the marine regulation (speeding or entry in a forbidden zone for example), they warn the marine patrols. »

CASE STUDY

National Marine Park of Zakynthos - NMPZ (Greece) & Port-Cros National Park (France)

In Zakynthos, where agents have no coercive power, the measures taken are naturally subject to the park's cooperation with the maritime affairs / coast guards and other relevant authorities. We must therefore motivate and get these administrations interested in the Park's objectives and to do this we need to schedule work meetings,» recommended Laurent Sourbès (Associate Director of Zakynthos National Marine Park).

At NMPZ, this cooperation has become a reality since 2011 through joint patrols involving Park agents and maritime affairs. These joint patrols yield a more rapid response, and also enable to both raise awareness among violators but also distribute sanctions when appropriate. «It works perfectly since the Park agent and the maritime affairs guard, who come from different organisations with distinct but complementary competences, are aware and accountable on both sides.» says Laurent Sourbès.

In Port-Cros National Park, where the situation is different since Park's agents hold police powers and therefore a degree of autonomy, cooperation with other relevant authorities is also considered an asset. «To establish cooperation with these authorities, we must however be able to overcome our cultural differences. We must educate these police players in environment protection issues. This involves training sessions with them to identify the crucial elements in the territory which need surveillance » recommended Nicolas Gérardin (Port-Cros National Park).

Extract from the proceedings of the 2013 regional exchange of experience workshop of the MedPAN network.



RECOMMENDATIONS

Do not try to enforce what you do not have capacity for; stakeholders feel impunity and lack of governmental commitment.

- *Cabrera National Park (Spain)*
- *Gökova SEPA (Turkey)*
- *National Marine Park of Zakynthos (Greece)*

Prioritise your enforcement actions in order to succeed and to create social trust. Target most serious offenses that everyone disapproves and not just the easiest ones to identify (e.g. no fishing is admitted in the "no take zones"). Consider the actions that can be implemented in coordination with the various administrative bodies.

- *Côte Bleue Marine Park (France)*
- *Telašćica Nature Park (Croatia)*
- *National Marine Park of Zakynthos (Greece)*

Joint patrols involving Park agents and other authorities competent in marine control (police, coast guard, fisheries inspection...). These joint patrols are more efficient in terms of rapid response, and also enable to combine information and appropriate sanction.

- *Côte Bleue Marine Park (France)*
- *Telašćica Nature Park (Croatia)*
- *National Marine Park of Zakynthos (Greece)*

Cooperation for the control of fishing activities: Guards often intervene on sea fishing offences even this does not fall within their commission. For this reason, they cooperate with the municipal police or fishing authorities.

- *Côte Bleue Marine Park (France)*

Collaboration from stakeholders: local fishermen, boat owners, and/or local NGOs can contribute in surveillance; even if they do not have authority to report infringement, they can collect photo evidence of offences (GPS positioning) and give it to the authorities to initiate prosecution.

- *Cabo de Palos - Islas Hormigas Marine Reserve (Spain)*
- *Gökova SEPA (Turkey)*

Start watching from land, which is much less expensive. Guards patrolling the beaches also monitor the marine area and warn marine patrols. Their presence is noticed and makes them visible to the locals, while promoting exchange and relationships with users.

- *Cabo de Palos - Islas Hormigas Marine Reserve (Spain)*
- *Isole Tremiti MPA (Italy)*
- *National Marine Park of Zakynthos (Greece)*

Element of surprise: permanent presence of patrols in the MPAs is very expensive; change routines, try to surprise the offenders in action, favor an adaptive strategy.

- *Alonissos and Northern Sporades National Marine Park (Greece)*
- *Various MPAs (Spain)*

Marking fishing gear (requirement under European regulations) to know the owner, and therefore prevent poaching. Unmarked nets are removed from the sea; fisherman are fined when they claim them back.

- *Côte Bleue Marine Park (France)*

Inform hotels and local tourism services about the MPA and the species protected, and regularly inspect the restaurants to ensure they don't sell illegal catches (selling of captures from recreational fishing in particular).

- *Cabo de Palos - Islas Hormigas Marine Reserve (Spain)*
- *Kas-Kekova SEPA (Turkey)*
- *National Marine Park of Zakynthos (Greece)*

Many technologies are available to help reduce surveillance costs and staff needs very significantly. AIS, wimax, tetra, VTMS, radar, geo-referenced cameras, drones and night vision devices, identify vessels and inform about their presence, movements and activities. Tetra and applications on smart phones also allow communication with the crews.

- *Cabrera National Park (Spain)*
- *Gökova SEPA (Turkey)*
- *Port-Cros National Park (France)*
- *National Marine Park of Zakynthos (Greece)*

Blue-box satellite emitters in vessels over 15m (obligatory in the EU) identify trawlers and purse-seine fishing boats.

- *AMP de l'UE*

Support agents' actions: Staff assigned to do surveillance must feel protected and supported by their employer and the administration in order to limit the effects of wear or «resignation» that occur when they feel threatened in their role, especially when they are not commissioned.

- *National Marine Park of Zakynthos (Grèce)*
- *Port-Cros National Park (France)*

Capacity building is fundamental. Ongoing training reinforces the interest of Park agents for what they are doing, involves them in scientific monitoring, motivates them, helps them develop a real sensitivity which makes them more efficient.

- *Port-Cros National Park (France)*
- *National Marine Park of Zakynthos (Grèce)*

6. Sanctions and prosecuting



Guillaume Sellier
Director of Port-Cros
National Park, France

« To encourage the judicial authority to adopt a dedicated criminal procedure, which is an essential element of the process, we must invite it to come on site to get to feel the marine space so that your mission becomes his. This is a deeply human process. »

A consequence of the fragmented competences is that less than half the MPAs keep a record of prosecutions. Also, when other institutions record infringements and prosecute, the MPA managers only receive timely information in 13% of cases. Some MPAs have never imposed a sanction, while the majority of MPA managers consider that sanctions are «only partially» dissuasive and recommend to make them more strict.

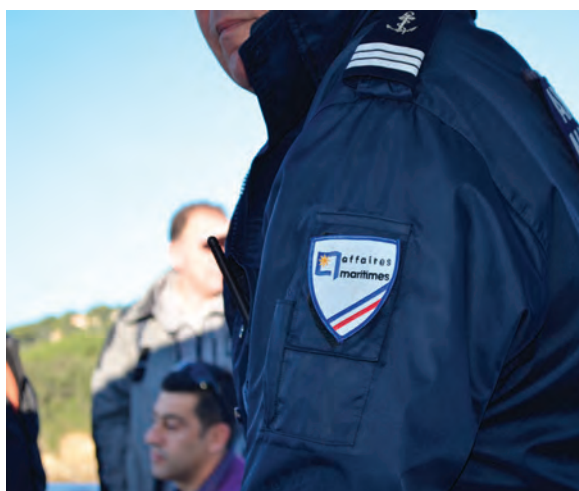
It is particularly important to raise the judicial authority's awareness: if the fines and penalties imposed are often not a deterrent, the problem usually stems from the courts' misconception of the offences, rather than the Law itself.

Some MPAs have established agreements with the coast guard or the police so that the latter take charge of the prosecution process when an offender is arrested by the Park's guards. This method may be simpler and more secure because the police have standard procedures to bring the offender before a judge (see the case of Brijuni National Park p. 22 in the workshop proceedings).

To establish cooperation with these authorities, one must however be able to overcome some cultural differences. Police and coast guard should be educated in environment protection issues. This involves training sessions with them to identify crucial elements in the territory which need surveillance (see the case study in Port-Cros National Park, France pp. 16, 25, 47, 90 in the workshop proceedings).

The MPA managers also recommend raising the judges and prosecutors awareness about MPA offences; only transmit strong cases to the prosecutor so that infringements against the environment are not filed away and forgotten (see the cases of Port-Cros National Park p. 24 and Telašćica Nature Park p. 70 in the workshop proceedings).

Main authorities involved in marine surveillance inside Mediterranean MPAs (MedPAN 2013)	MPA authority	Coast guard	Fisheries authorities	Police
Recording infringements	68%	55%	53%	40%
Prosecuting	30%	68%	40%	58%





RECOMMENDATIONS

Gradual sanctions: Start with a period of information, perhaps the first year. Most violations result in a warning, full information on the regulations is given, and the vessel is recorded. On the second year their offence is transmitted to the fishermen cooperative or to the related users organisations. After that, they are sanctioned.

- *Côte Bleue Marine Park (France)*
- *Os Miñarzos Marine Reserve (Spain)*

Prosecution: many MPA authorities can not prosecute; make an agreement with the police so that they take charge of the prosecution process when an offender is identified or caught by an MPA agent. Even when MPA agents have coercitive power, this method can be simpler and more secure for sensitive cases because the police have standard and reliable procedures to bring the offender before a judge.

- *Bonifacio Strait Nature Reserve (France)*
- *Brijuni National Park (Croatia)*

For MPA and judges to understand each other:

- The MPA authority should acquire good knowledge of legal developments and criminal proceedings. To prosecute you may need fisheries or transportation laws, not only environment laws.
- Only transmit strong cases to the prosecutor, to earn the judicial authority's trust. This trust is built over time.
- It is essential to raise the judges and prosecutors awareness about MPAs, so that infringements against the environment are not filed away. Also, when the penalties imposed are not a deterrent, the problem is usually the courts' misconception of the offences, rather than the law itself.

- *Bonifacio Strait Nature Reserve (France)*
- *Brijuni National Park (Croatia)*
- *MPAs in Israel*
- *Port-Cros National Park (France)*
- *Scandola Natural Reserve (France)*
- *Telašćica Nature Park (Croatia)*



7. Voluntary compliance



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The way to better comply with rules not only depends on surveillance and sanction but also on the rules themselves and their adaptation to each local situation. Enforcement will work best in a context that encourages mutual trust, informed public participation, education and awareness.

The regulations better understood are those related to fishing, diving and mooring. However, in general the level of understanding of MPA regulations in the Mediterranean is still considered «low» to «medium, just enough».

The MPAs in which regulations are enforced best and with ease are those that have developed these rules in consultation with the users, either diving centres (Cabo de Palos - Islas Hormigas Marine Reserve in Spain, or Kas-Kekova SEPA in Turkey) or professional fishermen (see Os Miñarzos Marine Reserve in Spain, Torre Guaceto MPA in Italy, or the cases of Côte Bleue Marine Park in France pp. 49-51, 53 or Gökova SEPA in Turkey pp. 33-39 in the workshop proceedings).

It is interesting that some MPAs have developed voluntary “codes of good conduct” covering many different activities: diving centres (10 MPAs), tourism operators (7 MPAs), recreational fishing (5 MPAs), scientific research (5 MPAs) and professional fishing (4 MPAs) (see MedPAN study on Enforcement 2013).

However, voluntary compliance on its own is not enough; it also requires proper enforcement (see the case of Gökova p. 31 in the workshop proceedings); those who collaborate with the MPA conservation want to see that the new regulations are observed by everybody.

To gain social trust it is also important to:

- Understand the local community's needs and build over time a relationship of mutual trust (see the cases of Gökova SEPA in Turkey pp. 37-38 and La Galite MCPA in Tunisia p. 89 in the workshop proceedings).
- Rules must be simple, easy to understand and accept.
- Rules should take account of local knowledge, as much as possible, without imposing new or strange behaviours (unless recommended by the best available scientific knowledge). See the case of the Côte Bleue Marine Park in France p. 50 in the workshop proceedings, where 81% of the fishermen think that the reserves' regulations are appropriate;
- Rules are set up quickly; some MPAs have taken over 10 years to develop them, thereby losing social support (see the case of Isole Tremiti MPA in the workshop proceedings pp. 80-83);
- The MPA itself must set an example: public reporting, better ecological practices, not mooring on Posidonia meadows, and so on (see the case of Cabrera National Park in Spain in the workshop proceedings p. 31).



RECOMMENDATIONS

Sharing objectives is the basis for a real participation. When planning the MPA marine zoning and the fishing regulations, make sure that future users can contribute with their knowledge, concerns and ideas.

- *Al Hoceima National Park (Morocco)*
- *Cabrera National Park (Spain)*
- *Côte Bleue Marine Park (France)*
- *Kas-Kekova SEPA (Turkey)*

Sharing information officially through regular meetings with stakeholders provides for better monitoring, adapting regulations, improved mutual trust and a sense of ownership over the MPA.

- *Côte Bleue Marine Park (France)*
- *Isole Tremiti MPA (Italy)*

Social sanction works well; fishermen organisations may punish offenders using their own internal regulations (e.g. the offender will be fined by his peers or is left last when distributing fishing fields, ice, or other services)

- *Cabo de Palos - Islas Hormigas Marine Reserve (Spain)*
- *Côte Bleue Marine Park (France)*
- *Fishing reserve in the Var county (France)*

Fishermen organisations are needed to really involve fishermen in the management process.

- *Farwa lagoon MPA (Libya)*
- *Kas-Kekova SEPA (Turkey)*

Rules must be understood and make sense to users. Try simple rules coherent with traditional knowledge. Make them widely known.

- *Cabrera National Park (Spain)*
- *Côte Bleue Marine Park (France)*

Appropriate infrastructure and services guarantee the manager's legitimacy and encourages voluntary compliance: ecological mooring sites, passageways on a dune site, other protective infrastructures encourage compliance with rules.

- *Cabrera National Park (Spain)*
- *Port-Cros National Park (France)*
- *Zakynthos National Marine Park (Greece)*

Building community trust needs solid steps; field results and small success stories are essential.

- *Brijuni National Park (Croatia)*
- *Cabrera National Park (Spain)*
- *Côte Bleue Marine Park (France)*

Voluntary agreements with professional fishermen and with diving centres have been developed in several MPAs

- *Brijuni National Park (Croatia)*
- *Menorca (Spain)*
- *Port-Cros National Park (France)*

Better practices: Charters of "good conduct" for diving centres (10), tourism operators (7), recreational (5) and professional fishing (4), scientific research (4) are developed in over 15 MPAs

- *See MedPAN (2013) for a full list of voluntary codes*

Summer campaigns: cleaning beaches with local school children usually makes them the best ambassadors for the Park. Also cleaning ghost-nets or seabeds with marina/yacht clubs or fishermen.

- *Gökova and Kas-Kekova SEPA (Turkey)*
- *Zakynthos National Marine Park (Greece)*



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Zafer Kizilkaya
Mediterranean
Conservation Society /
Gökova MPA, Turkey

« We did not arrive explaining to the locals what to do. It's been 10 to 15 years now that we support them and try to help them in their daily lives; with all the problems they face (health problems and others). We are like a family.»

🔍 CASE STUDY

Gökova MPA, Turkey

Zafer Kizilkaya (Mediterranean Conservation Society, Gökova MPA) stresses the importance of mutual trust that has been built over time between the local community and the manager in Gökova.

« This trust was built all along this journey together: after we had declared together the No-Take Zones (NTZ), but before we had a solution to enforce regulations, some poachers from elsewhere took advantage of the situation, the local fishermen came to me to express their dismay. I felt uncomfortable and obliged to act quickly, above all because I was their friend. So I asked them if they would like to do the surveillance of their territory themselves and some of them take on a marine guard role. They said yes and that they were ready. »

In Gökova, all marine guards are from the local fishing community. They really know the area and its users (who come, at what time, and why?). This is why the Mediterranean Conservation Society chose to entrust them with the surveillance of the NTZs.

The NTZs are now protected and controlled and deliver results. Another key element for Zafer Kizilkaya is to share the results with the community: «monitoring carried out in the NTZs shows an important number of groupers which has never been seen before. I filmed this and I showed it to the community because it is important to share these results. **This is the key to success: we share everything**».

In order for the NTZs community surveillance system in the Gokova Bay MPA to work, it was also essential to promote a trusting relationship between the fishing community's marine guards and the coast guards, which was far from being a given.

Arturo López Ornat also stresses **«the importance of trust, which is earned over time, little by little, and is built on very concrete steps to avoid giving false hopes.** In Gökova, available resources did not allow complete management of the area, and the effort was therefore focused on six relatively small No Fishing Zones; the good results have created trust. A lesson learned is that they preferred to prioritise a few things but really solve them. Trust from the community is essential but it has to build on solid steps; field results and small success stories are essential.»

Extract from the proceedings of the 2013 regional exchange of experience workshop of the MedPAN network.

8. Information and communication

More needs to be done to explain the MPA values and regulations, because in most of the Mediterranean region, communication and education activities in MPAs are taking place maybe just once or twice a year.

We will only protect what we know. Communication is a key issue to enhance MPA management actions, to improve behaviour and to overcome cultural barriers between stakeholders. It may be done through either formal or informal activities; for example just exchanging information, sharing language, worries, celebrating results... helps to gain mutual trust and builds a strong basis for a better enforcement (see case studies in La Galite MCPA in Tunisia p. 90 and Isole Tremiti MPA in Italy p. 82 in the workshop proceedings).

A number of communication, awareness-raising and educational activities should be developed using the capacities that already exist in the local society, for example local media, school teachers or local associations (see case of Farwa Lagoon–Libya p. 95 in the workshop proceedings). Summer campaigns, collective cleaning of beaches or sea bottoms and many others, as done by NGOs, have very important results on the awareness of local societies (see case of Gökova SEPA pp. 35-36 in the workshop proceedings).

Finally, visitors from outside the area are also concerned; MPA managers around the Mediterranean agree that the main cause behind their offences are ignorance or misinformation (see MedPAN study on Enforcement 2013). Signage is one of the essential aspects of communication: information must be made available to visitors upon their arrival on site, and tourist services allowed in the area should be asked to inform their visitors (see the case of Cabrera National Park pp. 27-28 in the workshop proceedings).



RECOMMENDATIONS

Prioritise messages, elect a step by step communications approach, do not try to publicise all the MPA values and regulations at the same time

- *Several MPAs*

Media coverage of the MPA in the press, TV, local radio or social networks shows how the Park is important for nature and people; it helps to educate competent authorities and stakeholders in general.

- *Cabrera National Park (Spain)*
- *Calanques National Park (France)*
- *Port-Cros National Park (France)*

Business: it is essential that the message delivered to users is clear and has prospects for the sustainability of their business over the long term, whether these are professional or recreational activities.

- *Zakynthos National Marine Park (Greece)*

Informing visitors: Ignorance or misinformation is the main cause of offence by users and visitors from outside the MPA:

- Use information panels on land;
- Place buoys delimiting the “no take zones”;
- As part of the licensing to operate inside the MPA, tourist operators themselves must inform all the visitors they bring in;
- Guards distribute brochures with detailed regulation information; every time they provide specialised information and explain the reasons of these regulations to someone, they are talking to people, making contact. It is important that visitors feel there is an interest in them and not that they are just in a protected area with rules to follow.
- In the summer, guards can meet the leisure boats on arrival, informing them about mooring sites and other rules.
 - *Cabrera National Park (Spain)*
 - *Gökova SEPA (Turkey)*
 - *Zakynthos National Marine Park (Greece)*



Stefano Pecorella
Isole Tremiti MPA, Italy

« Communication is a key issue to enhance our management action and overcome cultural barriers by involving all stakeholders »

Q CASE STUDY

Cabrera National Park, Spain

Cabrera National Park relies on a communication strategy using various media.

"The information must be made available in several different ways because some users do not use the same media. The Internet is not enough. We must consider the users on site, when they are in a boat for example," explains Jorge E. Moreno Perez, the Park's Director.

Internet website: the Cabrera National Park's website gives all the information required by visitors and even offers some services, such as the possibility of buying a mooring permit and pay directly online. Jorge Moreno explains how it works: «To enter Cabrera National Park, visitors need a permit. Leisure boats can tie up at any one of the 50 buoys at their disposal. They can stay 1-2 nights in the summer, and up to 7 nights in the off-season. In order to do this they need to download a permit from the website and pay online: this upfront payment policy has enabled us to find solutions in managing the anchorage area. **The advantage of this approach is that when the users make an Internet booking, we ask them to press the button "I commit to comply with MPA regulations". This does not mean that they have read all the rules that we ask them to comply with, but at least some of them, hence the need to develop rules which are simple to understand».**

Media coverage: media coverage of events such as the release of a turtle in the presence of politicians, or the King's visit in the summer can reach a wide audience through traditional media (newspapers, TV).

Information on site: signage is one of the essential aspects of communication. **The information must be made available to visitors upon their arrival on site.** «Cabrera is an island, so every visitor arrives by boat. Whether they come in their own leisure boats or by ferry, we strive to give them information as soon as they arrive».

- **In the summer, the guards meet the leisure boats on arrival**, informing them on where the moorings are and how they work, giving them practical information (the Park office's location...).
- **Visitors travelling by ferry to Cabrera is informed by the ferry company**, which is required to disseminate information provided by the National Park and is stipulated in their contract.
- **The Park's information centre is located in the immediate vicinity of the quay thus visible to every visitor which also helps to give information straightaway.**

The advantage of this approach is that it shows visitors upon their arrival on site that they are in a regulated environment.

Extract from the proceedings of the 2013 regional exchange of experience workshop of the MedPAN network.

Riserva integrale

Torre Guaceto / Marine Protected Area of Torre Guaceto

Stabilimento balneare PRIVATE BEACH	Servizi disabili DISABLED FACILITIES	Parcheggio PARKING	Sosta trailer PARKING TRAILER
Punto ristoro BAR	Noleggio biciclette BIKE HIRE	Navetta BUS	Punto informativo INFORMATION POINT
Prenotazioni visite guidate TOURS BOOKING POINT	Ciclotrekking - Trekking TREKKING AND CYCLOTRAILING	Snorkeling - Immersioni SNORKELING	Punto vendita prodotti tipici SALE POINT TYPICAL PRODUCTS
Museo / Centro visite MUSEUM / VISITOR CENTRE	Sport velici WIND SPORTS	Masseria FARM	Campo boe per natanti non a motore SERVICE AREA FOR NON-MOTORIZED BOATS
Punto raccolta in caso di incendio MEETING POINT IN CASE OF FIRE	Delimitazione Zona A - B - C dell'Area Marina Protetta BORDER OF ZONE A-B-C OF THE MARINE PROTECTED AREA	Sentiero pedonale FOOTPATH	Sentiero ciclopedonale BICYCLIST AND CYCLE PATH
Strada ad accesso autorizzato AUTHORIZED ACCESS ONLY	Percorso ciclabile CYCLE ROUTE	Strada a bassa densità di traffico LOW-DENSITY TRAFFIC ROAD	Strada provinciale e comunale PROVINCIAL AND MUNICIPAL ROAD
Canale Reale	Confine Riserva Naturale dello Stato BORDER OF STATE NATURE RESERVE	Linea ferroviaria RAILWAY LINE	Lagune costiere COASTAL LAGOONS
Uliveto secolare ANCIENT OLIVE GROVE	Zona umida WETLAND	Macchia mediterranea MEDITERRANEAN BUSH	

Strategia delle "5 R"
The 5 R Strategy

- Rispetto del paesaggio
Respect the Landscape
- Recupero
Recovery
- Riduzione
Reduction
- Riuso
Reuse
- Raccolta differenziata
Differentiated Recycling

È CONSENTITO
ALLOWED





PART 3

Decision-support matrix

This matrix lists key questions that should help you determine your strategy and your needs in terms of enforcement of regulations in your MPA. It should guide you to reflect about the enforcement situation in your MPA, to identify your enforcement needs and priorities and to approach your own strategy/action plan.

The matrix tries to adapt to all MPA contexts in the Mediterranean, taking into account the diversity of legal and institutional situations from one country and local situation to another. It is an operational tool that points out recommendations which may apply to everyone, MPAs which are consolidated or those which are just starting.

After filling in the following matrix, to prepare your strategy you might need to:

- Conduct a SWOT Analysis to identify your real strengths, weaknesses, threats and opportunities; another option is a DPSIR analysis (Driving Forces–Pressures–State–Impacts–Responses);
- Identify your priorities and establish a realistic calendar;
- List and approach your potential collaborators (institutions, businesses, and associations);
- Establish your own indicators and expected results, and review your progress once a year.

SECTION I – LEGAL AND REGULATORY BACKGROUND

Are your MPA regulations coherent/respecting other laws that govern the operation of other sectors in the marine waters (fishing, recreational activities, urban planning, transportation, energy.....)

Do you rely on all the other laws that in your country are applicable to the marine environment? (e.g. fisheries or transportation) - If in the EU, do you rely particularly on the European Directives?

Is your MPA authority competent to issue fisheries and recreational permits in the MPA waters?

If YES, do you set environmental and management restrictions for these permits?

Has your MPA established a limited number of allowed fishing or recreational boats? Has this limit ever been adapted or reconsidered?

SECTION II – INSTITUTIONAL CONTEXT AND COORDINATION

Is there a coordination body with other authorities which are competent in the marine governance (police, coast guard, fisheries inspection, local governments...)

Does your MPA make sure that each administrative body has an interest in participating in the collective effort?

Do the MPA agents have power to denounce and start a prosecution process?

Do the police, coast guard or other competent institutions help with the surveillance of infringements to the MPA?

Do the police, coast guard or other competent institutions help prosecuting infringements to the MPA?

Has the MPA promoted a specific enforcement plan with the participation of these institutions?

Have you tried to establish an awareness and promotion system (incentives, invitations, guests, good relations) for other administrative bodies to ensure their cooperation over the long term?

In particular, has the MPA tried to raise environmental awareness of the judicial bodies?

Is the MPA having annual meetings between stakeholders? (to assess results and to plan future actions)

	YES	NO	To be further developed	Not relevant	Actions needed? YES/NO	Very strong priority?

SECTION III – PROCEDURES, OPERATIONS AND RESOURCES

Does your MPA keep track of the number and identity of vessels with a professional activity (fishing, diving)?

Do you consider that the professional fishing registrations are fairly complete and trustworthy?

Are professional fishing data confidential and only used for scientific monitoring purposes?

Can your MPA provide opportunities for scientists to collaborate in the recording of fishing data?

Are your regulations hierarchical and based on the MPA managers' priorities?

Have you developed a strategic intervention programme (primarily targeting the most serious offences that everyone disapproves of and not just the easiest ones to identify), based also on the actions that can be implemented by the various administrative bodies?

Do you consider that your marine surveillance from land and port is optimised?

Have you considered using technology for the automatic and night identification of vessels?

Is your MPA aware and controlling in a satisfactory way the impact from recreational fishermen?

Are your sanctions gradual? Perhaps starting with a period of warning and information?

Do other institutions provide you a feedback about the prosecutions?

> AS A MANAGER

Have you acquired good knowledge on the natural environment?

And about the socio-economic context and practices?

And about regulations and their history?

And on criminal proceedings?

Do you have the financial and human resources available for surveillance to satisfy your plans?

[illegible]

SECTION IV - VOLUNTARY COMPLIANCE, INFORMATION, GOOD PRACTICES

> BUILDING TRUST

Is there at least one set of important regulations which are being well enforced? e.g. nobody is fishing in the “no fishing zones”; or “trawlers do not access the MPA”, etc.

Do you consider that your MPA can present some solid results and small success stories? e.g. show the benefits of the MPA to stakeholders (more fish, less poaching, improved economic stability, better registrations, better participation, more responsible tourism, youth employment ...)

Are your main regulations understood by stakeholders?

Are your regulations being developed in consultation with stakeholders?

Is the MPA complying well with its own rules? (e.g. no guards anchoring on Posidonia meadows)

> VOLUNTARY AGREEMENTS

Have you promoted voluntary agreements with professional fishermen, with diving clubs, or other users?

Have you promoted Charters of “good conduct” with fishermen, diving clubs, tourism operators, etc.?

> INFORMATION

Do you consider that your more important regulations are simple and make sense to users?

Have you developed a well-argued communication on the legitimacy of your regulations?

Is your MPA working with the media (press, TV, local radio or social networks) showing how the Park is important for nature and people?

Are land visitors informed about the main MPA values and regulations?

Are marine visitors informed about the main MPA values and regulations?

Has the MPA promoted campaigns (e.g. cleaning beaches with local schools, local associations or NGOs)

[illegible]

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