

The 3rd International Workshop in Advancing Conservation Planning in the Mediterranean Sea

Light and shade in the management and conservation of the Mediterranean Sea

Organised and chaired by Simonetta Fraschetti (University of Selanto, Italy) and Salit Kark (UQ, Australia)

April 2015

Workshop series goals

In 2012, we established a series of workshops that aims to bring together scientists and managers working on Mediterranean Sea conservation planning to discuss gaps and challenges in the area and advance collaborative efforts, novel work and better science based support for managers and policy makers in the region. The first workshop took place in Santorini, Greece and aimed to fill this gap. The workshop was initiated and led by Salit Kark, Sylvaine Giakoumi, Tessa Mazor, Hugh Possingham and Simonetta Fraschetti. The second workshop was hosted by Kark and Noam Levin in Nachsholim, Israel in 2013 and the third in Lecce, Italy in 2015, organised and chaired by Fraschetti and Kark.

These small workshops, each hosting 20-25 invited participants, have helped build a collaborative group of scientists from over 10 countries in the region and beyond who already work on conservation issues in the Mediterranean, and have resulted in scientific publications, joint research projects and outreach activity. In each workshop -4 topics are chosen to discuss and papers or other outcomes result from each working group.

The Lecce 2015 workshop covered these issues:

Intro: Priorities for the near future

The Mediterranean Sea is one of most human impacted seas in the world. In the last twenty years scientific knowledge has been accumulated on patterns of distribution of biodiversity and cumulative threats. In addition, national and international policies have been designated together with a plethora of conservation and management regulations. Despite these efforts, baselines tend to shift, food webs are altered, vulnerable habitats are lost, invasive species are increasing, mass mortalities and species outbreaks are often recorded, and climate is changing. In addition, direct and indirect human pressures on marine ecosystems are expected to increase considerably in the next few decades,

leading to further serious loss of marine biodiversity and the degradation of ecosystem functioning. Strong, multidisciplinary interactions are needed (from scientists to economists) together with new tools and methodologies to revert present trajectories of changes.

In this framework, the scientific community has a critical responsibility to individuate priorities of research and cost effective actions that can be easily translated and transfer into policy, legal and governance contexts. Starting from 2012, a group of scientists coming both from the Mediterranean and extra-Mediterranean areas have decided to meet on a regular basis and discuss to identify what are the most relevant topic to contribute to large-scale conservation and management of this basin.

The idea is to create a *fil rouge* able to connect people and ideas to set conservation priorities, to overcome transnational issues and to accelerate processes such as the planning of EEZs of fundamental importance considering the economic interests towards all these issues. A point of strength of this group of people is the interdisciplinary approach: people involved in marine sciences together with socioeconomists to find common areas of discussion and building new ones.

This year, in Lecce (Italy), 21 people met coming from eight Mediterranean and extra-Mediterranean countries (Australia and USA). In the two days, we discussed the challenges faced by this complex region in devising comprehensive spatial planning both in coastal and in deep sea environments, providing also a framework for implementing marine conservation plans accounting for invasive species, and suggesting different approaches how this could be done.

More specifically, marine/maritime spatial planning (MSP) is a key strategy for implementing ecosystem based management of the ocean that is broadly applied around the world. Within the Mediterranean Sea, MSP within the EEZ of countries is now mandated by the EU Maritime Spatial Planning Directive and as part of the Marine Strategy Framework Directive, representing an unprecedented opportunity to include conservation planning in the broader planning of marine uses with the aim of reconciling environmental protection and economic goals.

While general lessons and models for implementing MSP can be derived from previous experiences in northern Europe and around the world, comprehensive spatial planning in the Mediterranean faces additional challenges associated with the political and governance complexities of a semienclosed sea shared by 22 countries and rapid demographic, policy and environmental change.

In Lecce, a working group discussed the challenges faced by a complex region in devising comprehensive spatial planning and provide a framework for implementing

conservation planning in the EEZs of Mediterranean countries. Insights from our analysis will provide guidance for how to incorporate future change in spatial planning in other marine ecoregions.

Another group worked on incorporating the deep sea into conservation planning. The aim in this group was to discuss the importance of explicitly referring to the third dimension in marine conservation planning.

Finally, another group will aim to explicitly incorporate threatening processes, and namely invasive alien species, within systematic conservation approaches in the marine realm.

We hope this tradition of collaborative Mediterranean conservation planning workshops we have begun will continue as part of an EU COST action, with workshops in additional regions, such as Croatia and France.