

FIRST INTERNATIONAL CONFERENCE ON MARINE MAMMAL PROTECTED AREAS (ICMMPA) MAUI, HAWAII, USA

EXECUTIVE SUMMARY

From March 30—April 3, 2009, more than 200 marine mammal protected area (MMPA) researchers, managers, and representatives from various government departments and conservation groups from 40 countries met in Maui, Hawaii, to explore how they might build networks of people, institutions and protected areas to further the conservation of marine mammals and their habitat.

The overall conference theme of “networks: making connections” was explored in three conference threads focusing on (1) design, (2) management and (3) networking for the future of MMPAs and MMPA networks. These thematic strands were realized through a combination of talks and panels in a plenary symposium, followed by workshops, training sessions, posters and films.

The first symposium thread on design of MMPAs and MMPA networks established that there were a growing number of MMPAs but that their effective coverage of important or critical habitat remains slight. There are a few marine mammal networks in the early stages of development, including a sister sanctuary relationship between the US and the Dominican Republic for humpback feeding and breeding areas, but the network possibilities remain largely unrealized. There are substantial benefits in terms of exchange of knowledge and resources, as well as providing better protection for marine mammals. Engagement is also needed with the larger MPA community at the regional, national and international level.

In terms of management, many MPAs have been slow to set up effective management plans with monitoring regimes. To be effective, management must be continuous, science-based, incorporating ecosystem-based management as well as socioeconomic concerns and larger environmental issues, particularly fisheries, and include public participation with educational programs. However, the difficulties are considerable if political will cannot be cultivated. Many management approaches have been tried and can be evaluated and shared, including time-area closures, permitting/licensing mechanisms, targeted research, and various educational tools. Strategies for ensuring funding and achieving success on a low budget are equally important. Considerable energy was devoted to measuring management effectiveness. Adaptive management is considered an important tool but MMPAs should still be established with the best possible management from the beginning.

The third strand looked to the future and included, among other things, newer approaches for mobile MMPAs based on monitoring dynamic and ephemeral ocean systems as well as discussion of ocean zoning outside MMPA networks which becomes more important with



accelerating exploitation of pelagic waters and the high seas. Regional scale spatial management, using comprehensive ocean zoning, could help address threats throughout the extensive range of marine mammals. Protecting marine mammals as umbrella species can result in conservation measures to protect whole communities and ecosystems, and as such can be seen as investments in maintaining marine biodiversity and ocean health, but this can only work if threats are adequately understood and if management is truly tailored to the threats. In the brave new world of ocean zoning, the focus should remain on threats, and not revert to cookie-cutter approaches to MPAs, in the hope that they will solve every conservation problem. This consideration of marine mammals leading to broad conservation measures provided an added-value to the ICMMPA which transcended the discussions of marine mammal protection alone.

The high seas was touched on in various presentations in terms of design, management, legal aspects and incorporation into networks. Representing about half of the world ocean, the high seas provide habitat for many marine mammal species, though this area, due to its distance from land is much less studied than coastal and nearshore areas. The legal framework for setting up MPAs on the high seas has a strong foundation and has advanced considerably but with only a few exceptions has yet to be tried and fully tested. Over the next 2 years, the IUCN WCPA High Seas Task Force, the RAC/SPA in the Mediterranean and other regional scientific and conservation bodies plan to propose MPA networks on the high seas, so marine mammal critical habitat research will be essential. The ICMMPA is considering to make the “High Seas” as the theme for the next conference proposed for France in 2012.

MPA designers, planners and managers must continue to engage stakeholders, indigenous peoples, and the public through partnership, consultation, education and outreach to build constituencies of support for MPA networks. There is great potential in incorporating cultural practices (indigenous, historical and modern) in planning and managing MPAs. It is important that costs and benefits be distributed fairly among stakeholders.

It was recognized that there are various elements that can lead to the formation of MMPA networks, including:

- legal obligations created from regional or global agreements (eg, the Barcelona and Cartagena conventions),
- marine mammals migrating across various jurisdictions (eg, the Latin American cetacean network)
- requirements under national policies (eg, New Zealand)
- the need for standardized monitoring throughout a species' range (eg, US national marine sanctuaries)
- the desire to gather data to support a common decision (eg, support for sanctuaries within the IWC)
- critical habitat protection (eg, 33 sites identified in Mexico)
- creating sister MPAs to share expertise and lessons learned, and
- fulfilling the desire to connect people and institutions.



In addition to the symposium, workshops focused on criteria and mapping for critical habitat areas, getting stakeholders to talk to each other, exploring the role of culture in managing MMPAs, and creating regulations that work.

A special workshop and several talks were also devoted to monk seal conservation. The conference was fortunate to have a critical mass of the world's monk seal experts with problems and good conservation outcomes that could be shared from the Mediterranean, West Africa and Hawaii.

Training sessions covered marine mammal stranding, entanglement and health assessments, monitoring MMPAs (check-up and review), management planning, naturalist training and the role of education in the community and on the water.

The location of the conference in the middle of the Pacific was timely and appropriate. In January, the US had designated 3 new large MPAs in its Pacific territories and over the past few years, the number and size of MPAs had increased dramatically. To date, 7 of the 8 largest MPAs in the world are in the Pacific, and 11 of the top 15. In terms of highly protected, IUCN Category I areas, the area includes 4 of these, among the most highly protected MPAs in the world. It was recognized that the Hawaiian Islands Humpback Whale National Marine Sanctuary, the host and location of the conference, had been a pioneer MPA in the region and partly through its efforts with the collaborative international SPLASH program (Structure of Populations, Levels of Abundance and Status of Humpbacks) and SPWRC (South Pacific Whale Research Consortium), had contributed to the impetus for the conference and for the idea of solidifying and improving nascent networks in the Pacific.

Key recommendations, statements and comments emerging from the conference were as follows:

- The attendees valued the opportunity to have a forum to address and discuss their shared challenges and successes.
- As part of networking, a strong effort should be made to transfer essential skills, resources and capacity building to researchers and management staff in less developed countries to help them obtain the data necessary to develop and effectively manage MMPAs. A website with extensive resources and mentoring contacts should be set up as part of this, and teams of experts in the various aspects of MMPAs and network building could visit sites in order to teach and help measure effectiveness.
- An urgent worldwide effort must be made to identify and define important marine mammal habitats and hot spots. Then this information must be mapped with other species and eco-geographic data to assist in the design and creation of MPA networks in national waters and on the high seas, working through national governments as well as various regional and international fora. Critical habitat is not defined simply as high density areas. Less dense areas may be more critical to survival depending on behavior and population/stock structure and if threats are present in these areas that impact the population. Therefore not only critical habitat but threats and all other human uses must be mapped.



- The use of global databases covering environmental, oceanographic and marine species may assist progress in the identification of critical habitat and implementation of MPAs, but it needs to be “ground-truthed” against more local data and/or through an expert body using, for example, a Delphic process to arrive at proposed MPAs.
- Threats to species and habitats may occur outside of an MPA, so it is important to look “outside the box”. It may be possible for MMPAs to act as catalysts, partners or support for regional, national and international impact research and mitigation strategies.
- Bycatch is a key threat to marine mammals worldwide. If fishery regulations do not solve the problem of entanglements, MMPAs with no fishing zones could be alternatives to regular fishery management.
- For management, advisory councils are a strategy for effectively engaging stakeholders. Expert advisory groups can help ensure appropriate scientific expertise for designing research and monitoring projects.
- More attention must be devoted to management plans: developing and updating them to make them more effective and sharing “best practices” to guide future work, as well as developing effective methodologies for evaluation, and then sharing successes and failures in terms of measuring management effectiveness.
- Guidance needs to be developed to integrate traditional marine management tools and the use of MMPAs/MMPA networks for conservation: which is best when, and when to use both?
- In terms of advocating for MMPAs and levels of protection and zoning, marine mammal scientists should endeavor to present trade-offs and choices, so that decision makers can evaluate options (rather than forcing scientists to become advocates).
- The Conference supported the research goals and, in particular, the cooperative approach of the Southern Ocean Research Program (SORP).
- MMPAs should become centers for research innovation and creativity in terms of solving marine mammal conservation problems, then share that knowledge as widely as possible. (Good examples are the development of acoustic monitoring at Stellwagen Bank and the suite of techniques used to study as well as to help free gear-entangled humpbacks in the Pacific.)

The conference concluded with the announcement of a new potentially trilateral sister sanctuary relationship, with discussions underway between the conference host Hawaiian Islands Humpback Whale National Marine Sanctuary, the Glacier Bay National Park, in Alaska, and the Komandor Islands State Biosphere Reserve in Russia, all of which are visited by some of the same individual humpback whales migrating from their tropical breeding area to cold-water feeding grounds.

The ICMMPA will maintain a continuing presence on the www.icmmpa.org website and the steering committee will coordinate with the newly formed French Agence des Aires Marines Protégées regarding plans for the next ICMMPA, tentatively planned for 2012.

