



ZSL SCIENCE AND CONSERVATION EVENTS

# Sharp-toothed jaws and toothless laws: are we doing enough to protect sharks?

Tuesday 10 December 2013

The Meeting Rooms, The Zoological Society of London, Regent's Park, London NW1 4RY

**Chair:** Matthew Gollock, International Marine and Freshwater Conservation Programme, ZSL

## ***MPAs for sharks? Science, conservation and communication***

*Fiona Llewellyn, Marine Reserves Coalition Coordinator, ZSL*

Fiona Llewellyn, Sara Eckert, Matthew Gollock

Marine Protected Areas (MPAs) are a broadly accepted conservation tool that when designed and implemented effectively can deliver measurable benefits to marine species and habitats. As a spatial protection mechanism however, their value for mobile and migratory species has been widely debated. In recent years, interest in the topic has grown and there is now an increasing body of scientific evidence demonstrating that well-placed and effectively managed MPAs can benefit even very wide-ranging species, both directly by minimising human threats and indirectly by protecting and enhancing the habitats and ecosystems they depend upon. This includes the elasmobranchs – sharks, skates and rays, upon which conservation interest has grown in recent years. Despite this, there remains a need for further data to adequately inform MPA design and management for elasmobranchs. Additionally, the need for effective communication and stakeholder engagement remains at the forefront of MPA decision-making. Here we illustrate the global picture with regard to MPA coverage and shark distribution and review the current trends in the designation of MPAs specifically for sharks.

## **Threatened in the darkness: conservation of deep-sea sharks**

*Alison Perry, Oceana*

The life histories of deep-sea sharks make them highly vulnerable to overexploitation. Even among sharks, they tend to be especially slow-growing, late-maturing, long-lived, and have limited reproductive capacity. They are also widely caught as by-catch and in fishing that is directed at a certain species or group of species, and some species are commercially valuable. Current estimates indicate that up to six million deep-sea sharks are traded each year for their livers, with the majority of this trade supplying the cosmetics industry. In this talk, I provide an overview of the exploitation, management, and conservation of these vulnerable fishes. Focusing mainly on the European Union, I discuss the limited management and conservation measures that are currently in place, and describe how improving our knowledge about deep-sea shark biology, populations, fisheries, and trade is critical to shark conservation.

## **Addressing the threats to sharks**

*Sarah Fowler, Marine Biodiversity Conservation Policy*

The Shark Specialist Group's Global Red List Assessment of the world's sharks, rays and chimaeras (Class Chondrichthyes), which engaged more than 300 scientists for more than a decade, is the first comprehensive evaluation of the relative extinction risk to a major taxonomic group of fishes. This talk will summarise the results of the assessment, which have been used to identify the life history and ecological characteristics associated with greatest extinction risk, the regions supporting the largest numbers and highest proportions of threatened species, geographic hotspots of extinction risk, and the major threat - overfishing. With the exception of the amphibians, sharks and their relatives face a greater level of extinction risk than any other major taxonomic group of vertebrates. What's more, it is possible that the assessment, undertaken through a conservative consensus-based process, significantly understates the declines and risk to sharks and rays.

In contrast, conservation actions to address the threats to sharks have been slow and focused upon a few charismatic species, for example through CITES, the Convention on Migratory Species (CMS), regional biodiversity conventions and fisheries agreements, and national conservation laws. This presentation will review the slow progress with shark conservation through CITES, CMS and the Regional Fisheries Management Organisations, recent successes and failures, and summarise the most important challenges to be addressed over the next few years.