

**Session E:
Elasmobranch Fisheries: Developments in stock assessment, technical mitigation and management measures**

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Elasmobranchs (sharks, skates and rays) are taken in a range of targeted and mixed commercial fisheries, and are also of interest to recreational fisheries and wildlife conservation groups. The large size of elasmobranchs and their aggregating nature makes them susceptible to capture in many fisheries from an early age. They are also biologically vulnerable to fishing impacts, given that their life history strategy involves a late age at maturity, slow growth and low fecundity. Declines and regional extirpations have been documented for a range of elasmobranch populations and there has been an increased concern over the status of several species/stocks in recent years. In 1999, the FAO published its International Plan of Action for Sharks (IPOA-Sharks), giving guidelines for data collection and management measures, and it was recommended that shark action plans be implemented at a national level.

Although elasmobranchs are at a high risk of capture in fishing operations, they have to date received limited attention in terms of bycatch mitigation in comparison to other charismatic megafauna (e.g. cetaceans and sea turtles). Nevertheless, in the course of research into mitigation devices for release of marine mammals, options to reduce elasmobranch bycatch have been found (e.g. in Mauritanian pelagic fisheries). Other possible mitigation devices aimed specifically at reducing their bycatch have been suggested but not fully developed.

In order to address many of the current issues in elasmobranch fisheries management, it is proposed to hold a theme session at the ICES ASC 2010. This theme session aims to bring together recent studies on elasmobranch fisheries and talks on the following subjects are encouraged:

- Development of stock assessment methods.
- Utility of fishery-independent surveys for examining long-term trends in spatial extent and relative abundance.
- Reconciling fisheries stock assessment and conservation assessment methods.
- Development of Ecological Risk Assessments (ERA) and management plans for species-complexes (e.g. “deep-water sharks”, “demersal skates”, “pelagic sharks”).
- Studies on the efficacy of potential management measures.
- Research with technical mitigation measures used directly or indirectly to reduce elasmobranch bycatch.
- Discard survival of elasmobranchs taken by commercial fishing gears.
- Size restrictions for elasmobranch fisheries: should managers protect the young (e.g. with a minimum landing size, MLS) and/or mature females (e.g. with a maximum landing length, MLL).
- Spatial management for ecologically important elasmobranch habitats.
- Management of highly migratory shark stocks.
- The implementation of National Plans of Actions for Sharks and their outcomes.

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