

**International Commission for the Conservation of Atlantic Tunas (ICCAT)
Standing Committee on Research and Statistics (SCRS)**

**Terms of Reference for a
SUB-COMMITTEE ON ECOSYSTEMS**

These Terms of Reference have been developed as a result of a decision made by the SCRS in 2005 to merge the Sub-Committees on By-Catches and Environment into a single group.

The overall goal of the newly-created Sub-Committee on Ecosystems is to integrate the monitoring and research activities related to the ecosystem that are required by the SCRS in fulfilling its advisory role to the Commission. In so doing, the Sub-Committee will serve as the scientific cornerstone in support of an Ecosystem Approach to Fisheries (EAF) in ICCAT.

The Sub-Committee will meet as required by SCRS, usually in conjunction with the SCRS annual meeting. The Sub-Committee's work will encompass the specific tasks listed below, *inter-alia*. As these cannot all be realistically tackled at once, the SCRS will prioritize these tasks.

1. Monitoring

- Create and maintain an inventory of species caught by fleets targeting tuna and tuna-like species in the Atlantic and Mediterranean.
- Improve conventional statistics (catch, effort, size) of ICCAT target species that are caught incidentally in non-targeted fisheries.
- Monitor and improve information on interactions with non-ICCAT target species, with emphasis on those species of interest to the Commission and for which no Species Group has been established (e.g., sea turtles and sea birds).
- Facilitate access by SCRS scientists to oceanographic and environmental data.

2. Research

- Evaluate the relative impact of the different abiotic and biotic factors (including oceanographic and climate phenomena, directed and incidental fishing, predation, competition, pollutions and other human impacts) that affect the abundance, distribution and migration of ICCAT target species.
- Characterize main feeding and reproductive habitats of ICCAT target species.
- Characterize the volume, composition and disposition of non-target species that are caught incidentally in tuna and tuna-like fisheries within the Convention area.
- Investigate trophic interactions of ICCAT target species.
- Investigate the impact that changes in fishing gears or fishing technology have on the catch of target and non-target species.

3. Modeling

- Develop reference points and indicators that explicitly incorporate ecosystem considerations.
- Develop simulation, dynamic and statistical models focusing on mixed-fisheries, multi-species, bycatch and ecosystem issues.

4. Advice

- Develop mechanisms which can be used to better integrate ecosystem considerations into the scientific advice provided by SCRS to the Commission, including but not limited to, Precautionary Approaches.
- Investigate, through operational models, potential benefits (at an ecosystem level) of alternative management strategies, such as time-area closures.
- Advise on the impacts of tuna and tuna-like fisheries on the populations of non-target species of interest to the Commission