

EXECUTIVE SUMMARY

Tuna fisheries managed by RFMOs incidentally capture various non-target species, commonly referred to as bycatch. The impacts of bycatch on some of the affected species is not well understood and, in some cases, measures to mitigate bycatch are either not available or have not been fully implemented. In recent years, some information regarding interactions with non-target species, including marine mammals, sea turtles, seabirds, and several species of sharks and finfish has become available to the tuna RFMOs, but it is clear that additional, more representative and comprehensive data are still needed to inform conservation and management decisions. Tuna RFMOs have, to varying degrees, considered and evaluated the type and characteristics of fishery interactions, the population status and distribution of bycatch species, the impacts of their fisheries on such species, and the effectiveness of bycatch mitigation measures. Unfortunately, reliable and sufficient data are not universally available for all bycatch species, regions, or gear types.

The tuna RFMOs, recognizing that the UN Agreement on Straddling and Highly Migratory Fish Stocks calls for the application of precautionary and ecosystem approaches to the conservation and management of such stocks, have struggled for some time to make targeted conservation and management decisions in face of the uncertainty regarding bycatch and its impact on non-target species. In particular, RFMOs have been hampered by a lack of sufficient, standardized data on bycatch species, bycatch rates, bycatch interactions, and the overall status of the non-target species themselves. This lack of data constrains RFMO efforts to develop, implement, and more efficiently enforce bycatch mitigation measures, and to evaluate the effectiveness of such measures over time, and often results in lingering disagreement regarding the most appropriate and effective approaches for assessing and mitigating bycatch.

Amidst this uncertainty, what is evident is that bycatch species of concern broadly overlap with fisheries managed by all of the five tuna RFMOs, and that some populations are in decline or are depleted. In most cases, the impact of tuna fisheries on their populations has not been adequately assessed, although it is known that interactions differ by species, region, and gear type. Efforts to address bycatch would clearly benefit from additional research geared toward the development of effective bycatch mitigation measures. Some tuna RFMOs have conducted performance reviews and have been urged by their review panels to make further progress toward the application of ecosystem-based approaches, particularly with respect to the establishment of systematic data collection requirements for bycatch species. All of the tuna RFMOs have adopted some measures to assess, avoid, or reduce bycatch, or to minimize the post-release mortality of bycatch. The ability to determine whether these measures have achieved their objectives is highly variable – some have resulted in dramatic reductions in bycatch over time, while others have only recently been adopted and/or have not been sufficiently monitored to determine their success.

Several tuna RFMOs have also begun to address critical research and data needs, as well as to apply management tools that aid in decision making and in assessing whether conservation measures are meeting their objectives. Some of the approaches tuna RFMOs are undertaking include prioritizing research and management objectives, conducting ecological risk assessments, developing monitoring and reporting schemes, and prescribing periodic review and evaluation of effectiveness of conservation measures. Some tuna RFMOs have also developed multi-lingual educational materials and training programs to facilitate capacity building, but additional work in all of these areas is needed.

Resources and expertise in improving the understanding of the nature, frequency, and impacts of such interactions on the bycatch species are available to the tuna RFMOs within their own ranks, as well as via IGOs and member nations with relevant expertise. Some tuna RFMOs have begun to coordinate with other RFMOs and IGOs to avoid duplication of efforts and increase efficiencies in managing bycatch species. Still, many opportunities for tuna RFMOs to work more collaboratively and efficiently with other RFMOs, IGO, and member nations remain. In addition to longer-term collaborations, immediate opportunities exist to improve bycatch management within tuna RFMOs by expanding observer programs, collecting standardized data within those programs, and adopting proven methods to avoid and minimize impacts to bycatch species, including the use of gear modifications and/or spatial and temporal management of fleets.