SEA TURTLES DATA COLLECTION AND RESEARCH PROGRAMME
Adopted at the
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The research programme should acknowledge the huge breadth of biological research being undertaken by the worldwide turtle research community, and should focus the Commission's activities to support objectives for which it has particular expertise, resources, and responsibility.

Objective: Identification of areas of spatial and temporal importance to fishery interactions and population impacts on sea turtles, so that the Commission can target time area strata of major importance for bycatch mitigation measures and other actions.

An illustrative example of achieving this objective would be the much clearer picture now available on seabird distribution in relation to fishing effort. This has allowed some Commission members to efficiently target management measures in specific regions. The research programme should support the following activities directed towards defining sea turtle stock distributions and vulnerability to fishing gear.

1. Activity: A More Comprehensive Fishery Observer Programme

    a. Coverage: To adequately characterize statistically rare events, up to 100% observer coverage can be required. But bearing in mind the practicalities involved, the programme should:

        i. Initially be spatially and temporally representative of each fishery operating in the Convention Area.

        ii. Given diminishing benefits of greater coverage (SC2 ST WP-1), the programme should aim to observe 20% of the fishing effort over a two-year period. As a practical matter, however, a sudden increase to this level (from the current level of 0.5%) is unlikely to occur. Therefore, an initial minimum of 5% of the fishing effort be observed. When areas of greater importance are found, the observer programme may be restructured to optimize coverage in these areas.

    b. Data collection

        i. The SPC observer manual, reporting forms, and standards should be used as a model, and should be cross–checked with the corresponding Hawaiian and other manuals and standards to ensure all the necessary turtle data collection details are included, and, where relevant, data on other species potentially affected by new mitigation measures. Some of these programmes have focused

intensely on the requirements for sea turtle bycatch management. (This activity will be addressed through the Statistics Specialist Working Group recommendation on observer data, Statistics Specialist Working Group report, para. 29 (a)).

ii. Programme priorities should be clearly specified and as should the way in which observation time is directed towards sea turtle observation versus other objectives. Other activities can effectively prevent effective bycatch observation, so this documentation is essential for interpreting the effective observer coverage, including historical coverage.

iii. Observer data should be submitted to the Commission for centralized collection and analysis.

2. Activity: Tagging and Telemetry

a. Tagging should be widely expanded to include conventional styles of tagging (e.g. flipper tagging, pit tagging) by trained fishers and observers (see Fishers Education) to provide information on post-release survival and movements.

b. Satellite and archival telemetry should be encouraged in order to achieve broader coverage than is sometimes achieved by the very active turtle telemetry research community. The Commission should encourage and support further effort of this community by making trained observers available for satellite/archival tagging on fishing vessels. Researchers should be encouraged and supported to broaden the habitats and regions where turtles are tagged.

c. Information from tagging should be provided to the Commission, and shared with the South Pacific Regional Environment Programme (SPREP).

3. Activity: Documenting Other Sources/Areas of Population Impact

a. Turtle nesting beach habitats should be comprehensively surveyed, monitored, and evaluated for the opportunity to undertake activities supporting population recovery.

b. Comprehensive information and investigation of impacts on turtle populations from sources outside the fisheries jurisdiction of the Commission should be requested from members. Information on overall anthropogenic mortality and other sources of mortality is just as essential as information on other vital rates (e.g. age and growth) for assessing the dynamics and status of the populations and for choosing effective management strategies.

Objective: Reduce the capture and injury of sea turtles in fishing gear

The Ecosystem and Bycatch Specialist Working Group provided a good review of recent progress as well as a recommended approach for research on gear improvements and for incremental, flexible implementation of management measures.

1. Activity: Improved mitigation measures

Scientific experiments should be undertaken to test a range of mitigation techniques in order to determine appropriate mitigation measures for a particular fishery or area.

Research should also continue to be focused on the development and implementation of improved mitigation measures and turtle handling and release methods.

2. Activity: Industry Education

   a. CCMs should be responsible for providing training to fishers in sea turtle identification, handling and release, including provision of a manual on sea turtles (which would include information on mitigation, identification, handling and release). This may facilitate fishers assisting in data collection.

   b. Self-reporting (logbook reporting) of turtle identification and release condition (e.g. alive, dead, how hooked, gear remaining on turtles).

   c. Tagging of sea turtles by trained fishermen prior to release.

   d. The Commission should make available existing educational material that member nations could use to provide information to their fishers on how to reduce captures and mortality of sea turtles.

3. Activity: Development and Sharing of Improved Release Methods

   New methods for releasing sea turtles caught on circle hooks are needed and are under development. Observers' and fishermen's recent experiences with circle hooks indicate greater difficulty in releasing turtles caught with circle hooks than with more traditional J and tuna hook types. Programmes in the USA and Latin America are experimenting with new methods. The programme should monitor and potentially adopt these newly developed methods as appropriate.

4. Activity: Expand the existing initiatives to investigate turtle mortality from FAD entanglement.

   This is an area of concern that should be evaluated for its priority and for potential management measures.