



QUESTIONNAIRE-BASED SURVEY TOOL TO COLLECT DATA ON SEA TURTLE BYCATCH AND INTERACTIONS WITH FISHERS

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Sea turtle biologists and conservationists interested in collecting data on sea turtle bycatch and turtle-fisher interactions should consider the UNEP/CMS- Abu Dhabi Standardised Dugong Catch/Bycatch Questionnaire, which is also appropriate for use with cetaceans (Pilcher & Kwan, 2012). Predominantly based on protocols developed by the Project GLoBAL Rapid Bycatch Assessment (<http://bycatch.env.duke.edu/>), Phuket Marine Biological Center (Thailand), San Francisco State University (USA), and James Cook University (Australia), the survey tool was designed, reviewed and tested to ensure it was widely applicable across regions, scientifically valid, and culturally sensitive. Examples of its successful use in sea turtle studies can be seen in reports by West & Mchomvu (2015) and Phillott *et al.* (2015) in this issue of IOTN.

This resource includes more than the questionnaire; the accompanying project manual outlines methods for data collection, including importance of random sampling, entering data to standardized table, and creating graphics, and outlines appropriate interview training and methods. The questionnaire itself provides an introduction statement to ensure informed consent, and captures information on interviewee background and fishing experience, sea turtle, dugong and/or cetacean catch/bycatch, fishery information, and interviewee perceptions about population sizes and trends and seagrass areas. The complementary table for data entry has dropdown boxes to ensure data quality and standardization, and step by step instructions for creating graphics using Google Earth and saving Google Earth files compatible with GIS analysis programs are provided.

From my personal experience in using the survey with undergraduate students and graduate assistants to

interview fishers in Bangladesh, I highly recommend this resource. However, we benefitted from adding images of fishing gear, as fishers commonly misidentified their gear (longline, gill, seine, trawl net etc) from our description when we compared responses with that they were currently repairing. Our interviewees were also unable to identify their fishing locations on a map, and we asked additional questions about direction, speed and length of travel to more accurately determine fishing areas. Researchers utilising the survey tool may wish to consider the literacy and familiarity with maps of their interview subjects, and provide additional resources where required.

Literature cited

Phillott, A.D., J.M. Mathew, N. Krishnankutty, S.S. Ara, S.T. Shathy, T. Akter & Z.I. Khan. 2015. Estimates of turtle bycatch in fisheries of Chittagong Division, Bangladesh. *Indian Ocean Turtle Newsletter* 22: 5-11.

Pilcher, N.J & D. Kwan, 2012. Dugong Questionnaire Survey Project Manual. CMS-UNEP Abu Dhabi Office. United Arab Emirates. September 2012. 44 pp. Available at <http://www.cms.int/dugong/en/publication/revision-survey-questionnaire-project-manual-and-upload-file-available-1>.

West, W & B. Mchomvu. 2015. A pilot study of the interactions between marine turtles and the artisanal gill net fishery in Temeke District, Tanzania. *Indian Ocean Turtle Newsletter* 22: 2-5.