UNTANGLING THE TANGLED: KNOWLEDGE, ATTITUDES AND PERCEPTIONS OF FISHERMEN TO THE RESCUE AND THE DISENTANGLEMENT OF SEA TURTLES IN KALPITIYA, SRI LANKA*

Anand Ramanathan[1], Avanti Mallapur[2], Saman Rathnakumara[3], Lalith Ekanayake[3], and Thushan Kapurusinghe[3]

[1] International Fund for Animal Welfare, 1350 Connecticut Avenue NW, Suite 1220, Washington, DC 20036, USA
[2] Department of Animal and Avian Sciences, University of Maryland, College Park, MD 20742
[3] Turtle Conservation Project (TCP), Sri Lanka, 389, Godagama, Kosgoda, Sri Lanka

Turtle bycatch causes several thousand individuals of various sea turtle species to die every year. While turtle bycatch mitigation strategies are well established for trawl fisheries, fewer efforts are in place when dealing with floating gillnet fisheries. This is a project first developed to proactively disentangle sea turtles while simultaneously gauging the knowledge, attitudes and perceptions of fishing communities of Kalpitya in Sri Lanka. Based on an interview-based questionnaire survey of 319 fishermen, we found significant differences in fishermen's attitudes towards sea turtles, with 39% (n=124) saying turtles are important to conserve while 32% (n=102) were indifferent and another 16% (n=51) did not think that they need to be saved. However, 97% (n=309) of the individuals believed that turtles predominantly lived on fish while 60% (n=188) of them were convinced that turtles were detrimental to their fishing catch. From a conservation standpoint, it was important to note that the fishermen of Kalpitiya did not hunt turtles. A considerable number of them believed that turtles were endangered (67%, n=214) and supported sea turtle habitat protection (81%, n=257). They also agreed that nets and fishing lines were a threat to turtle survival (82%, n=262). Finally, a significant number of individuals were interested in helping with sea turtle and habitat protection (98%, n=310). Our research showed although fishermen had some knowledge about turtles and their habitats, there was a need for long-term conservation awareness focusing on education and training of fishing communities in marine conservation. To this end, a combination of awareness and community development programs initiated for fishing communities resulted in enlisting their support and/or their participation in sea turtle disentanglement. The sea turtle disentanglement component focused on rescuing turtles caught accidentally in fishing nets off the western coast of Sri Lanka during the 'flying fish' season from November 2006 to May 2007. Forty-six turtles were rescued during the six-month period with olive ridleys (*Lepidochelys olivacea*) accounting for a large proportion (96%, n=44). In addition, a green (*Chelonia mydas*) and a hawksbill turtle (*Eretmochelys imbricata*) were also rescued. After collecting morphometric data, all the rescued sea turtles were released safely back into the sea after double-tagging them on both flippers. While 54% (n=25) of the olive ridleys were adults, 52% (n=24) were males. Some rescued turtles were injured (7%, n=3) due to entanglement while others suffered shell damage (17%, n=8). Some sea turtle species get killed when caught accidentally in fishing nets when not foraging for fish. But active foraging for fish was causing entanglement of carnivorous olive ridleys. Sea turtle rescue and disentanglement can be a useful proactive strategy to help save adult populations in feeding and breeding areas. But assessing fishermen's attitudes and developing strategies to enlist their support and/or participation is vital to untangling the tangled turtles in floating gillnet fisheries.