
BYCATCH IN THE ARTISANAL PERUVIAN FISHERIES: GILLNETS VERSUS LONGLINES

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Fisheries bycatch remains one of the major threats to sea turtles and other vulnerable and endangered marine fauna. While much attention has been focused in recent years on longline bycatch, less is known about incidental take in the rapidly expanding gillnet fisheries in Peru. We present information collected since 2005 by onboard observers on bycatch of sea turtles and other marine fauna such as dolphins, seabirds and sharks in the artisanal (small scale) fisheries in central and southern Peru. Data are from both gillnets and longline vessels. Preliminary results show that Peru's gillnet fleet has a similar frequency of interactions with sea turtles as the longline fleet (CPUE of 0.3304 vs. 0.3326 turtles/set for gillnets and longlines, respectively). At the species level, however, there are differences in interaction rates. Artisanal longline vessels primarily interacted with loggerhead turtles, whereas gillnets had greater take of leatherbacks and greens. In addition to fishing gear impact on turtles, there is also the issue of retained bycatch which tends to be much higher in localities where coastal gillnets operates. From turtles caught in longlines, 98.4% were released with minor injuries or without injuries. Of those turtles captured with gillnets, 70.1% were released without injury or with minor injuries and 23% were retained for human consumption. We discuss relative impacts of gillnet and longline fishing practices, current and planned mitigation measures and implications for sea turtle conservation and management in Peru. We highlight the need to address gillnet impacts on marine fauna - especially in the case of the critically endangered leatherback turtle.

SYNERGY OF TURTLE EXCLUDER AND BY-CATCH REDUCTION TECHNOLOGIES IN SHRIMP TRAWL NETS IN THE GULF OF GUINEA

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The majority of commercial vessels in West Africa sub region are shrimp trawlers of about 23.0 – 25.0m length overall (LOA). In Nigeria and Cameroon over 252 vessels (representing 86% of the licensed industrial vessels) catch marine shrimps which are exported to earn foreign currency worth about US \$65 million annually. Demersal shrimp trawling generates large quantity of by-catch (landed and discarded/trash fish) at a ratio of 1:8 to 1:19 of shrimps to by-catch. In addition the endangered turtles are captured as incidental catch to shrimps because they (shrimps, fish and turtles) stay in close proximity to each other within the environment especially in relatively shallow waters below 50 m depth. The reduction of incidental catch of sea turtles and juvenile fish in shrimp trawling are therefore regarded as priority issues in the total efforts to conserve the resources and develop more responsible and sustainable fisheries. In 1996 Turtle Excluder Device (TED) became a precondition and regulatory requirement for export of shrimps to US markets. In September 2006 a 3-man team of U.S. experts conducted a re-certification exercise and inspection of TEDs' design, operation and monitoring and control in



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