

The Net Gain of Working with Fishers to Reduce Bycatch

Entanglement in Trinidad's coastal gillnet fisheries is the largest single source of mortality to leatherback sea turtles in the country, killing more turtles than all other factors combined and threatening to unravel several years of proactive conservation and management. As many as 3,000 entanglements are estimated to occur each year, and that as much as 35 percent of these result in the death of the turtle. The crisis places a severe strain on the ability of fishers to operate economically, as nets damaged by sea turtles retain very little fish.

Because it supports the second largest known nesting aggregation in the world, the Republic of Trinidad and Tobago plays a crucial role in the global survival of this species. To facilitate stakeholder-driven solutions to the crisis, the Wider Caribbean Sea Turtle Conservation Network (WIDECAST) and the Fisheries Division (Ministry of Agriculture, Land, and Marine Resources) hosted a national consultation in February 2005. Fishers from all affected communities, local and national non-governmental organizations (NGOs), national management agencies, the Ministry of Foreign Affairs, and a handful of international fishing and conservation experts participated.

The goal of the three-day workshop was to devise a series of potential solutions that fishers and natural resource managers could field-test and evaluate. To this end, twin objectives were proposed: fishers must be better off economically as a result of any proposed solution to the bycatch crisis; and the incidental capture and mortality of leatherback sea turtles in coastal fisheries must cease. By workshop's end, the participants concluded that no single solution would suffice for all

areas. A series of bycatch reduction experiments was proposed, with the eventual objective that one or more of the reduction methods would be adopted. The participants agreed that fishers should take part in the testing and development of each new method.

Workshop recommendations included evaluating new bait types—artificial, dead, and non-traditional—to promote hook-and-line fishing as a replacement for nets; use of new technologies or gear modifications, such as power take-up reels or alternate net materials; fish aggregating devices; modifications in net fishing methods, such as adjusting net depth; means to repel turtles from nets, such as the use of sonic pingers; use of shark silhouettes on nets; and new regulatory regimes to seasonally ban net fishing up to 8 kilometers offshore of major nesting beaches.

Endangered sea turtles live or die at the hands of people who encounter them every day. Solutions to serious conservation challenges rely on stakeholder participation and the art of consensus. The fishers of Trinidad—in an ongoing dialogue with their government and NGOs—are actively engaged in solving one of the most significant bycatch challenges in the world, and they are well on their way to achieving this goal.

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Gillnet fishers in Trinidad and Tobago. © JORDAN GASS, 2005

