



## Incidental Captures of Cetaceans on the Coast of Ecuador: Analysis of Interaction with Fisheries, Lessons Learned, and Future Strategies, 2001-2024

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Human interactions continue to affect cetacean populations worldwide. In particular, fisheries comprise one of the most serious conservation threats for whales and dolphins. We summarized information from the strandings and bycatch records database obtained by the Pacific Whale Foundation (PWF), Museo de Ballenas, and compiled from the scientific literature, personal observations, media, and the MAATE - GBIF occurrence database to examine the prevalence of this threat to cetaceans along the coasts of Ecuador.

We analyzed 270 stranding records of 20 cetacean species, verified by photographs or videos, from June 2001 to March 2024. Fifty-nine cases involving 10 species were identified as strandings associated with fishing gear, as indicated by the presence of nets, ropes, floats, and fin lacerations, pointing to direct fishing-related incidents. The humpback whale was the most affected species, constituting 39% (n=22) of the cases, followed by the bottlenose dolphin at 14% (n=8), pantropical spotted dolphin at 13% (n=7), dwarf sperm whale at 9% (n=5), short-beaked common dolphin and short-finned pilot whale (5%). Additionally, during PWF field monitoring, 28 cases of live cetacean entanglement were observed with fishing nets, mainly surface gillnets, predominantly involving humpback whales (98%) and coastal bottlenose dolphins (2%).

Since 2022, we conducted various educational activities, including 16 training sessions with fishermen and stakeholders on dolphin rescue (involving 75 fishermen from six coastal communities), the distribution of 1,500 environmental books about cetaceans and threats to their survival to 20 schools in Puerto López, training for 77 teachers on cetaceans, benefiting 2,310 students, and the creation of two films to raise awareness about cetaceans. These films were broadcast on local TV in Puerto López. Collaboration among researchers, NGOs, governments (MAATE), decision-makers, and local stakeholders is essential for understanding and addressing fisheries issues comprehensively. It requires a collective effort in knowledge acquisition, mitigation, and solution

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