

**SUSTAINABLE VERSUS UNSUSTAINABLE CONSERVATION EFFORTS
ALONG THE PERUVIAN COAST ^{TWS}**

Michael K. Schwartz

Wildlife Biology Program, University of Montana - Missoula 59812

In December 1996, a study was initiated with the goals of balancing the needs of marine wildlife (fur seals, sea lions, and penguins) with the needs of a local artisanal fishermen at Punta San Juan, Peru (15° 22' S 75° 11' W). Original plans were to collect data on 1) foraging locations of those marine predators are most heavily exploited (directly and indirectly) by the fishery and 2) locations where local fisherman capture their marine resources (i.e. fish, eggs, mollusks). With these data we planned to identify locations of heaviest overlap and interaction, and propose regulations to limit fishing in areas of marginal productivity value for the fisherman, yet high mortality rates for the wildlife, especially in the case of the Humboldt penguin, a species listed under CITES appendix I. Despite our ability to accurately collect data, integrate them into a simple, easily understandable series of overlap charts, and derive legal regulations prohibiting fishing under certain conditions, this approach will be received with scepticism. I will now outline a newer approach to conservation of the Peruvian marine ecosystem, which attempts to better integrate the ideas and life-styles of the local fishing community. I will describe the history of the

conservation of the living resources of the marine upwelling system in Peru, and provide examples of how small attitude changes in the conservationist can produce a large change in the desired results.