Marine Conservation in Chile: Historical Perspective, Lessons, and Challenges

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Abstract

Chile is one of the world's leading countries in landings (catch) of marine resources. The pioneer studies of human impacts on coastal marine communities provided the scientific basis on which to establish novel resource management strategies for exploited wild populations but were not used to develop a comprehensive marine conservation plan that would also include no-take areas. We reviewed the development of marine conservation actions since approximately 1970 to date, focusing on the (1) complex legal framework for establishment of marine protected areas, (2) scientific grounds that provided the impetus to establish areas where exploitation is regulated, (3) private efforts that were critical to creating the first marine protected areas, and (4) lessons and constraints derived from this process as well as the challenges ahead. The existing legal tools for the protection of the ocean include natural sanctuaries, marine reserves, marine parks, national monuments, and management and exploitation areas for benthic resources. These instruments may be applied in coastal marine protected areas. It is remarkable that most of the existing marine protected areas in Chile are sponsored and administered by private organizations. We think the sequence in which the development of the different conservation instruments occurred, with a high priority reserved for initiatives tending to promote exploitation of the ocean (aquaculture and fisheries), poses challenges and constraints for establishing a network of marine protected areas that combine such apparently diametrically opposing goals as exploitation and preservation of marine species. More recently, the value of preserving biodiversity became evident with the creation of the first marine parks. We encourage more scientific information on patterns of biodiversity, biological processes, and assessment of human impact to be incorporated in the process to reach the goal of preserving 10% of the representative marine habitats along Chile's coast.