

底棲資源生產的替代方案 --智利北部人工魚礁技術

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智利沿海的秘魯洋流是帶來全球最高產量的洋流之一。過度捕撈造成海洋資源下降，這提供發展改進漁業的新技術，特別是針對沿岸底棲區域的機會。智利漁業規範針對家計型漁民的『底棲資源管理與開發區域 (AMERBs*)』，最新版提出導入人工魚礁的可能性。這對漁民而言為外來技術，且尚未有應用接受度或阻礙的相關資訊。因此本研究選在 AMERB 的 Pisagua 村莊，它由智利北部一小型家計型漁民組織管理，曾參與人工魚礁計劃實驗，且位於 Pisagua cove—Atacama Desert 海岸的 6 km² 小型港灣。本研究在 2016 年 7 月 26 至 8 月 4 日面訪 30 名家計型漁民，詢問個人資料、活動、資源概況和對人工魚礁技術的態度。初步結果顯示 83% 漁民認為人工魚礁是底棲資源生產的替代方案。該組織 50 歲以上且具有超過 25 年漁業經驗的漁民佔 57%。

*翻自西班牙語: *Áreas de Manejo y Explotación de Recursos Bentónicos*

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Artificial Reef Technology in Northern Chile as an Alternative for Benthic Resource Production

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The Humboldt Current flowing along the Chilean coast is one of the most productive in the planet. Nevertheless, marine resources are declining due to overexploitation. This situation opens the door to the application of new technologies that could ensure recovery of some of its fisheries, especially, those related to the coastal benthic zone. The Chilean fisheries-related legislation includes "Areas of Management and Exploitation of Benthic Resources" (AMERBs*) exclusively for artisanal fishermen, legislation which, its newest version, includes the possibility of introducing artificial reefs within the AMERB boundaries. This technology is alien to our artisanal fishermen and nothing is officially known about the acceptance or resistance to its potential application. To learn about this issue a survey was conducted in the Pisagua village AMERB which is under the control of a small artisanal fishermen organization in northern Chile and participated in previous an experimental artificial reef project. The AMERB is located in Pisagua cove, a small embayment of 6 km² in the Atacama Desert coastal system. The data for this survey was collected in face-to-face interviews from a total of 30 artisanal fishermen between July 26 and August 4, 2016. Questionnaires considered four items: individual description, activity, resource profile, and attitude towards artificial reef technology. Preliminary results of the survey show that 83% of the fishermen surveyed see artificial reefs as an alternative to the production of benthic marine resources. Within the organization 57% of the fishermen are older than 50 years with more than 25 years of experience.

*From their Spanish name: *Áreas de Manejo y Explotación de Recursos Bentónicos*.

Keywords: Benthic resources, Artificial reefs, Humboldt Current, AMERBs

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