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Cubagua’s Pearl-Oyster Beds: The First Depletion of a Natural Resource Caused by Europeans in the American Continent

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Abstract

Interdisciplinary approaches to understanding the causes and mechanisms of depletion of natural resources provide powerful tools in biological conservation policy. That is the case for neoextinctions from both history and conservation biology perspectives. We report here what we believe was the first depletion of a natural resource in the American continent by Europeans: the pearl-oyster (Pinctada imbricata) beds off the coast of Cubagua, Venezuela, in the early part of the Sixteenth century. To that end, we reconstruct the historical events as well as the economic and political background that led to that depletion. Based on historical documents, we make a conservative estimation of the level of exploitation. Based on the natural history of that mollusk species as well as on its competitor, the turkey-wing mussel, Arca zebra, we hypothesize about the reasons that led to the depletion of the pearl-oyster and why it did not recover. We conclude that the exploitation of the pearl-oyster beds was unsustainable because of its intensity and the ecological and economic environment in which it developed. We also conclude that this type of overexploitation also results in gross violations of human rights. In addition, the benefits of this type of exploitation are short-lived, and favor foreign interests and/or local elites to the exclusion of native population. The lessons of this type of historical precedents should be considered by policy makers, particularly in developing countries where overexploitation of local resources still mirrors those of early post-Columbian America.