

# SCIENCE

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## AN ILLUSTRATION OF PRACTICAL RESULTS FROM THE PROTECTION OF NATURAL RESOURCES

ABOUT fifteen years ago a highly enlightened administration of the government of Peru became interested in the decline of the country's valuable guano industry and the apparent diminution in number of guano-producing birds. It was the privilege of the writer to be engaged by the Peruvian government for an investigation of the condition of the guano industry and the possibilities of its preservation, as well as for studies relating to the fisheries and to the marine fauna and flora. On my arrival in Lima I was impressed with the alert attitude of government officials in reference to the guano industry and with their anxiety to take whatever measures might, as the result of careful investigation, be found conducive to the conservation of the guano birds. A most significant preliminary step had indeed already been taken through the closure of the three Chincha Islands.<sup>1</sup> After an extended investigation, a series of recommendations for the general regulation of the guano industry was submitted to the Director de Fomento, and, with his approval, the report was reproduced in SCIENCE for July 10, 1908. A few excerpts from that report will be illustrative.

2. The present tendency to decrease in numbers (of birds) may be checked. There is a wealth of reliable testimony from the older men of long experience in the industry, that the useful birds, . . . were formerly vastly more abundant than now. . . . If they have endured the treatment they have received without decrease in numbers, then pro-

<sup>1</sup>Two of the islands were shortly opened for guano extraction under pressure of circumstances, but the South Island remained closed through three breeding seasons, affording a convincing demonstration of the utility of the measure. (See "Habits and Economic Relations of the Guano Birds of Peru," *Proc. U. S. N. M.*, Vol. 56, p. 484.)

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