

appropriate to quote most of their remarks by way of introduction to the present paper:

“Cocos Island lies in latitude $5^{\circ} 33'$ north and longitude $87^{\circ} 2'$ west. It is about four miles long in its longest diameter, which is east and west, and has a circumference of about thirteen miles. Its highest part, on its western side, is visible from a distance of sixty miles. The island is mountainous, presenting on all sides perpendicular cliffs, and above these steep slopes and canyons. The northern side, however, has several indentations. * * * Streams of fresh water flow down on all sides of the island, in most places pouring over the cliffs into the ocean. * * *

“The rock composing Cocos Island is volcanic, but is not made up of layers of lava as is the case with the Galapagos, Rivillagigido and Guadalupe Islands, but, at least about Chatham Bay, forms one solid mass as does the volcanic rock on Clipperton Island. The surface is greatly eroded, there being everywhere, as before stated, numerous deep canyons, and the rock is almost everywhere covered by a rich shallow soil.

“The climate resembles that of Clipperton, being extremely humid. The island lies in the warm counter equatorial current which flows past Cocos in an easterly direction towards Panama Bay, where its waters are deflected to the north and south. With the currents flowing as they now do, it is apparently impossible for plants or animals to be carried by them from the mainland to Cocos Island.

“The vegetation is extremely rich, though the number of plant species is few. Everywhere a dense covering of tall trees and smaller undergrowth clothes the irregular mountain slopes and ridges. In this respect Cocos strongly contrasts with any other island of the eastern tropical Pacific. Guadalupe Island, the Rivillagigido and Galapagos archipelagos are for the most part dry and barren, even the wettest parts of the Galapagos being far less humid and less thickly covered with vegetation than is Cocos.

“Animal life on Cocos Island is very scarce. Besides the birds there is present a rat, *Mus norwegicus*, brought hither by vessels that have touched here for wood and water. A lizard, *Anolis townsendi*, is rather numerous. With the exception of a