

by William Beebe

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Galápagos: World's End

CONTAINS Eighty-Three Black and White Half-Tone Illustrations as Well as Twenty-Four Illustrations on Nine Color Plates. It is Printed on High-Grade Paper in Quarto Volume and Has a Beautiful Back and Fore Lining. The Special Author's Autograph Edition Comprises One Hundred Copies Printed on French Hand-Made Paper and Signed by the Author.



William Beebe

NOR twenty years William Beebe has followed the trails of strange and rare animals, birds and insects into the remote parts of the earth-into the jungles of Borneo and British Guiana. through the waters of a half dozen seas, across the deserts of Mexico and Mongolia. Tortured by ants and threatened by headhunting Dyaks, he has lain in the thick grass of Sarawak for hours to watch the mating dance of the Argus Pheasant. Through the tangled lianas, orchids and giant ferns of Brazil he has followed to discovery the rarest of jungle creatures; he has gained an intimate knowledge of the last living links between birds and reptiles.

In a pail full of sea water he is able to find a whole world teeming with life. In a square yard of jungle floor he has discovered another complex and fascinating world in which is enacted day by day the whole cycle of Nature's law.

And these wonders Mr. Beebe has not kept to himself, nor even to the small group of scientists

who share his passion for discovery and observation. Through the medium of a fine clear style and with a superb sense of the imminent and the dramatic, he has recorded for the layman the stories of his achievements with an enthusiasm which reaches out from the printed page and sweeps over the reader himself. Of a struggle between two colonies of ants Mr. Beebe makes an epic of war in which



you see the troops attacking valiantly in columns, the wounded cared for, and one army at least destroyed before it will surrender or retreat.

Of three distinguished men born with the gift of writing of Nature—Fabre, Hudson and Beebe —but one remains. In *Galápagos; World's End* he has given a fascinating account, superbly illustrated in half-tone and in color, of his latest ex-

pedition into a forgotten land which might well have served as a background for *The Inferno*.

The list of Mr. Beebe's earlier books includes:-

Two Bird Lovers in Mexico. (1905) The Bird (1906) The Log of the Sun (1906) Our Search for a Wilderness (1910) Tropical Wild Life (1917) Monograph of the Pheasants (1918-22) The Edge of the Jungle (1921) Jungle Peace (1919)



Mr. Beebe is the Director of the Department of Tropical Research and Honorary Curator of Birds of the New York Zoological Society; Fellow of the American Association for the Advancement of Science; American Ornithologists' Union; Society of Mammalogists; Ecological Society; New York Academy; Linnaean Society; Corresponding Member London Zoological Society; Silver Medallist Société d'Acclimatation de France; Elliot Medalist, etc.

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The following are excerpts from GALAPAGOS. WORLD'S END and give a glimpse in the author's own words of an expedition into the world as it existed before the appearance of Man.



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FAR out in the Pacific, and yet not in the South Seas, is a cluster of cold volcanos which, over three hundred and fifty years ago, was known as the Enchanted Isles. The Seventh Lord Byron has seen them, has stumbled over their ruggedlava, and was astonished at the tameness of the birds;



Three sea-lion pups on Guy Fawkes Rocks wholly without fear of human beings

Robinson Crusoe was brought here by his buccaneer rescuers and must have rejoiced that his luck had not cast him upon these inhospitable shores.

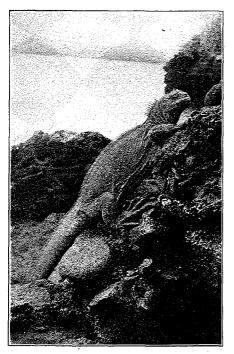
As we shall see more in detail later, the historical relation of man with these islands has been through thirst, war, tortoise meat, and mystery. The first hint that we have, coming dimly through the earliest years, is that the Inca Chief Tupac Yupanqui, grandfather of Atahualpa, sailed out into the Pacific long before the first voyage of Columbus, and discovered a mountain of fire which he named Ninachumbi. But if this, as seems probable, was one of the Galápagos, he must have visited other islands as well, for he brought back negroes and a throne of copper. The cold Humboldt current sets strongly northward from Chili, and turning westward at Peru, leaves the vicinity of the mainland and debouches into the Pacific, washing the shores of the Galápagos. Its temperature is from 15° to 20° lower than normal

equatorial water, and in times past it undoubtedly bore the penguins and southern seals which are now found on the islands. It was this current, combined with prolonged calms, which also carried the Bishop

of Panama against his will to the Archipelago in 1535 and gave us the first definite account of the islands, the tameness of the birds, and tortoises so gigantic that men could ride upon their backs. The Spaniards almost died of thirst but lived



by chewing the thick pads of cactus, and finally found a little water cupped in hollows in the rocks.



This is the only lizard in the world which is marine. It exists only in the Galápagos Islands and reaches a length of four feet.

Charles Darwin spent over a month in these islands, and from observations on the varying forms of bird life he derived perhaps the first inspiration for his Origin of Species. From that day to this, the islandshaveremained almost unchanged. At rare intervals a schooner passed or was wrecked on some outjutting lava reef. But for month after month, and year after year, on most of the islands the reptiles and birds and sea-lions knew only each other's forms and alone watched the sun rise and set. Generations of these creatures came and went without ever seeing a human being. On the twenty-eighth of March of the present year I slipped overboard from a motor life-boat and waded ashore through crystal clear water.

GALAPAGOS

caught my first wasp, a tiny red-bodied Larid, running about on the damp soil, which proved to be a new species.

In a hollow I found the perfect skeleton of a goat with very beautiful, long, curved horns, and close by there were eight skeletons close together, all of full-grown animals.

Great *Epeira* spiders hung their webs from bush to bush, in such numbers that after a half mile of walking the front of my shirt was a network of grey silk. These spiders were the most abundant of all the fifty-odd species recorded from the Archipelago. Many were an inch in length, with widespreading, pale orange legs, dark body, a wide, scalloped, cream-coloured marking down the back, and others on the sides. So strong were the webs that no insect was safe and I often saw the largest sphinx moths and the giant grasshoppers hanging like rolled-up, silken mummies. Once a young *Geospiza* finch flew into a web, and hung for a few seconds fighting to free itself. I went toward it, when it fell to the ground and with difficulty flew off.

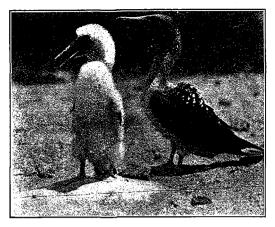
Among other spiders was one which we called the Union Jack, *Lathrodectes apicalis*, a species found only in the Galápagos. This lived among the lava rocks, in crevices, and spun a little sheet of web before its door. It was strikingly coloured; the legs and cephalothorax dull leaden brown, the abdomen black with a yellow band around the anterior border. Three great slashes of scarlet extended from below over the posterior half, converging toward the back. It was closely related to the red and black spider of our own States, which is everywhere feared as a creature whose bite is deadly.

A remarkable thing about Galápagos life was the presence of so many groups, many of which were represented by only one or two forms. For example, there is only a single praying mantis or devil's coach horse, and here, on Seymour, I found two specimens, dead leaf brown, and quite wingless. One was

242

The above is a facsimile reduction of a full page from GALÁPAGOS: WORLD'S END. The type in the original is twelve point and reads thus;—caught my first wasp, a tiny red

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A little duck flew down, paddled and waddled to our very feet, looked up into our faces, and quacked in curiosity and astonishment. I knew it for the fearlessness of the Garden of Eden, the old tales of Cook and Dampier come true again.

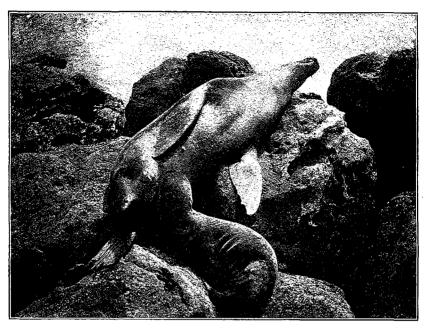
Blue-footed Booby, Parent and Young. A vast colony of these birds was discovered on the crater floor of an extinct volcano.

Suddenly I got a tremendous

shock as I felt a soft, warm, rubber - like substance press against my hands. 1 leaped back and at that instant a baby seal rose directly in front of me, treading water with his hind flippers, while his front mittened fingers were folded funnily across his breast. He looked at me with all his soul, and forthwith broke into a loud, raucous wail. A deep roar sounded from the other side of a barrier of huge boulders, and instant-



Giant Tortoise climbing a hill of lava. The only specimen seen of a reptile which once overran the islands in great numbers. The Tortoise is the oldest of living creatures.



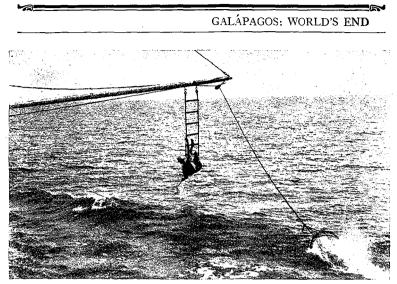
Galápagos sea-lion and her pup, so tame that one can approach and pick up the young animal at will.

ly there appeared, swiftly swimming and banking sharply on the turn, a mother sea-lion and two more infants. She saw me at once and her fear died so instantly that it was not wholly complimentary. She might have explained it, "That thing, whatever it is, is not a shark, so it's all right!" She barked a something out to the youngster and swam back and forth watching me both above and below water.

I went on with my chiton prying, greatly to the edification of the four young seals, who, gathered in a circle not more than six feet away, never missed a movement of mine. Again and again one would swim forward under water and nuzzle my fingers to find out what I was trying to do.



At last, having overcome the powerful suction of



The author in Mid-Atlantic dipping strange sea creatures from the breast of the Gulf Stream

the shell, I walked along the series of pools with the young seals keeping alongside, eager to see what would happen next. On an out-jutting flat rock which seemed the day nursery hereabouts, were several mother seals suckling their young.

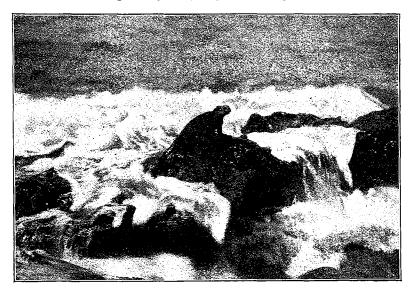
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We had just put up a tent on Harrison Cove, Indefatigable, when the Artist suddenly called our attention to a small seal or snake swimming across the quiet waters. We all ran down to intercept it and there clambered out our first black sea iguana. I once saw some crocodiles in brackish water; for a lizard to climb out of the sea was as surprising as dolphins in fresh water or song birds in a brook, both of which I have seen. The big reptile slipped down a deep crevice of the rocks, and we had given it up and turned campward when another rushed out from under foot and crept beneath a flat lava rock. My fingers just reached its tail, and for five minutes all my strength availed nothing against the twenty claws of the lizard. Little by little he gave way, but when I had acquired about fifteen inches of tail, I had to yield my place. We won in the end, but our first lesson was a thorough one in the tremendous grip of these talons.

Within two days we realized that these islands were still in the age of reptiles, or rather of reptiles and birds; amphibians and indigenous mammals being wholly absent, and fishes above the water negligible although sail-fish and mullets leaped high and blennies climbed out and flicked here and there upon tide-soaked rocks.

Giant tortoises and land iguanas dominated the upper parts of the islands while the jolly little Tropidurus lizards ran everywhere under foot. But the shores were held by the big black, iguanas, who, more than any creature I have ever seen, except the hoatzin, brought the far distant past vividly into the present.

Iguanas have been recorded as reaching fifty-three inches in length, and a weight of twenty pounds. I saw several which I am sure were four feet long, but the two largest captured were thirty-five and fortyone inches respectively, the latter weighing thirteen pounds. Young ones a foot in length weigh only a quarter of a pound.



Marine Iguana in the surf, feeding on a species of Sargassum Alga.

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One of their most curious habits was revealed on a late afternoon when I lay flat on the sand watching the ageless surf pounding on the lava boulders. Over the jagged, tortured summits there climbed the largest iguana I saw on the islands. It was a full four feet in lengthappearing forty to my lowly viewpoint. His head was clad in rugged scales, black and charred, looking like the clinker piles of the island; along his back extended a line of long spines, as if the skin of lava he had added a semblance of cactus. He saw me and stopped, looking long and earnestly with curiosity, not fear; then with his smug lizard smile unchanging, he dismissed me with an emotional feat as strange as his appearance; he twice solemnly nodded his whole massive head, he sniffed and sent a thin shower of water vapour into the air through his nostrils and clambered past me on down toward the water. If only a spurt of flame had followed the smoky puff of vapour, we should have had a real old-fashioned dragon! He had come from whatever an Ambly finds to do inland at midday, and was headed seaward at high tide on whatever errand calls such a being into activity at such a time. His nth great-grandfather had perhaps looked at the first Inca or Spaniard with the same dignity and nonchalance. As far as appearances went he himself might have been as old as the lava.

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The expedition went to the Galápagos aboard the chartered yacht Noma and the account of the trip reads like a tale of adventure. Days of rolling on the Atlantic through the Gulf Stream with giant waves which buried the bow and forecastle A halt at Key West and a visit to Havana Another stop at the Isthmus where Mr. Beebe went on a midnight hunt through a tropical storm in search of the rare banded water opossum Tarpon fishing from the slippery spillway of the great Gatun Dam Then through the canal into the Pacific until the strange grey peaks of the Galápagos rose out of the azure sea Troubles over coal and water . . . Thrilling discoveries among the lava rocks and tidal pools . . . And last of all a trip homeward with the strangest cargo a ship has carried since the ark Marine iguanas, giant land lizards, monkeys, baby sea-lions, live birds and stuffed ones All manner of bird, beast and fish, enter New York aboard a pleasure yacht bound for the Zoo and the Museum In specimens and records, Mr. Beebe has reconstructed the Galápagos Islands for those who have never seen their strange unearthly beauties.



Drawing by Ralph Barton of Willie Beebe trying not to arouse the suspicions of an unusually good specimen until the men come up with the net.



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