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## books

### Ascension— The Story of a South Atlantic Island

By Duff Hart-Davis. Doubleday & Company, New York, 1973. \$6.95.

Ascension is a lonely British outpost set almost square in the middle of the South Atlantic Ocean: the island is the geologically recent tip of a volcano that thrusts up several miles from the sea floor and is among the most harsh and remote islands in the world. The nearest land is the island of St. Helena, 700 miles to the southeast.

Even in this day of leisure travel to unheard-of places, Ascension is virtually off limits to the curiosity-seeker, and indeed there is little about this barren, lava-strewn landscape that many people would find inviting. Yet the story of the living things—plant, animal and human—that have passed their days on this hostile cinder is one of such endurance and adaptation that it is worthy of the attentions of scientist and layman alike.

Hart-Davis has done a creditable job of relating this story, beginning with the island's discovery by Portuguese explorers in 1501. Treeless and virtually waterless, Ascension held no attraction for settlers, and not until 1815 was it claimed for Britain in order to prevent its being used as a base for attempts to liberate Napoleon from his exile on St. Helena. From 1815 to 1922 the island was variously under the command of the navy or the marines.

At one time it was commissioned as a ship of the line, while at another its garrison was carried in the bows of a ship stationed at Gibraltar! During this time it functioned as a supply depot and a sanatorium, particularly for His Majesty's ships engaged in suppressing the slave trade. By 1922 its function had become that of a communications station, and authority passed to the Cable and Wireless Company—a situation that has continued more or less to the present. The island was an important stopover for American planes during World War II and has lately

been of further use in tracking missiles and in the Apollo program.

No doubt the island was despised by many of its inhabitants, and life in Ascension in the 1800's was rugged in the extreme. Commandants had to struggle not only with great difficulties in maintaining morale, food, and water, but also with the incredible fickleness of an insensitive Admiralty. Yet throughout there appears in the writings of commandants, troops, visitors, cablemen, and the gardeners who labored to bring forth sustenance from the mountaintop, a genuine affection for the serene and austere beauty of Ascension and the "extra thrill of the realization that one is on a tiny island in the middle of a vast, flood-lighted ocean, a mere spot of land, almost insignificant, lapped by waves a thousand miles from anywhere."

Also presented is a fair summary of the native fauna and flora of the island and of the many, and often disastrous, man-made introductions. Although Hart-Davis exhibits laxity in dealing with facts of natural history, apart from a few such inaccuracies and the impossible shade of green with which the printer has imbued the cinder plains on the dust jacket, I found this book to be a delightful and readable history of a place unique.

—Storrs L. Olson

*Dr. Olson is a zoologist at the National Museum of Natural History and recently discovered and described from Ascension the remains of an extinct, flightless rail—the island's only native land bird (Smithsonian Contr. Zool. 152, 1973).*

### The Bone Hunters

By Uri Lanham. Columbia University Press, New York, 1973. \$12.95.

Few people outside the academic community realize how strongly scientific activities are affected by the interplay of money, politics, and human foibles. A new book describes the important role these factors played in the lives of two of the most renowned vertebrate paleontologists of nineteenth-century America, Edward Drinker Cope (1840-1897) and Othniel Charles Marsh (1831-1899). Their infamous feuding was so fierce that Joseph Leidy, the Academy's well-known vertebrate paleontologist, withdrew altogether from what had become "no longer a fit field of work for a gentleman."

Lanham's well-illustrated, carefully researched

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### NEW FOSSIL EVIDENCE OF THE ORIGIN OF FRIGATEBIRDS

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Today the five closely related species of frigatebirds (Fregatidae) are entirely marine forms that are highly adapted for prolonged soaring and for feeding from the surface of the ocean. They have long wings, greatly reduced legs and feet, a long forked tail and highly pneumatic skeletons with much fusion in the bones of the pectoral girdle. Although the frigatebirds have almost always been included in the order Pelecaniformes, they are generally considered as forming an aberrant group that has no obvious ties with other pelecaniform birds and at times it has even been suggested that they might be more closely related to taxa outside the Pelecaniformes. Apart from sub-fossil

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material of recent species from islands in the South Atlantic, no fossil frigatebirds have been recognized and nothing of their origins was known.

This situation has now changed with the discovery of a remarkably well-preserved skeleton, including feather impressions, of a primitive frigatebird from the Lower Eocene (Green River Formation) of Wyoming. The size of body of this bird was roughly the same as that of the Lesser Frigatebird *Fregata ariel* but the wings were shorter and the legs, feet and toes better developed. There was no fusion in the pectoral girdle and none of the bones shows any indication of having been pneumatic. The conformation of the bill and tarso-metatarsus show definite resemblances to the Sulidae, suggesting that boobies and frigatebirds had a common ancestor in the Cretaceous or Palaeocene. The fossil frigatebird was much less specialized than the modern forms, but there is nothing in its structure that would preclude its being directly ancestral to *Fregata*. It may have been gull-like or skua-like in its habits and was probably better able to land and feed in the water or on shore than its modern derivatives. The deposits in which it was found were formed in the bed of a large saline inland lake, indicating that the frigatebirds were not entirely marine in origin and that the ancestral forms probably occupied a wider range of habitats than does *Fregata*.