

By Storrs L. Olson

# A flightless bird, lost and found

*The trail of the rail led down into a black hole on Ascension Island, a barren volcanic way station of the mid-Atlantic*

Ascension Island thrusts 2,817 feet up above the tropical South Atlantic Ocean, the tip of a volcanic cone in the vast undersea mountain range known as the Mid-Atlantic Ridge. Few pieces of land in the world are so isolated.

From Ascension it is about 1,000 miles to Africa, 1,200 miles to South America. The closest dot on the map is 700 miles southeast, the remote island of St. Helena, which was Napoleon's last prison. Ascension was discovered by the Portuguese in 1501 but men shunned its dry, barren ground until the British installed a garrison there in 1815 to deter any attacks on St. Helena during Napoleon's detention.

Still a Crown possession, the 34-square-mile island is now the site of two British communications stations, a U.S. Air Force base and a NASA tracking station. In addition, but without the benefit of such elaborate technology, sea turtles somehow navigate all the way from South America to lay eggs on Ascension's beaches, and tremendous numbers of seabirds gather from the ocean's reaches to nest there.

Ascension became especially interesting to naturalists when it was discovered that a colony of nearly a million sooty terns, which lay their eggs on the main island, commence breeding every nine months instead

*With a Smithsonian grant, Storrs L. Olson (left) reconstructed this skeleton of a rail. He is writing his doctoral dissertation on the rail bird at Johns Hopkins University.*

of the more usual twelve. But since the arrival of man and the rats, cats and so forth which go with him, the other species of seabirds that once nested on the island in profusion have been forced to retreat. On Boatswainbird Islet, a white monolith of volcanic rock about a quarter of a mile off the eastern shore of the island, one still finds myriads of boobies, noddy terns, tropic birds and frigate birds. Except for four species introduced by man (partridge, myna, waxbill finch and canary), there are no land birds on Ascension—at least no longer.

In 1656 a traveler by the name of Peter Mundy visited Ascension and noted in his journal:

"Att evening wee arrived att Ascention and anchored on the NW. side of the iland. . . . Some of our company went up and broughtt downe six or seven goates, doubtlesse att first left there by the Portugalls: allsoe halfe dozen of a strange kind of fowle, much bigger then our sterlings . . . collour gray or dappled, white and blacke feathers intermixed, eies red like rubies, wings very imperfitt, such as wherewith they cannott raise themselves from the ground. They were taken running, in which they are exceeding swift, helping themselves a little with their wings . . . shortt billed, cloven footed, thatt can neither fly nor swymme. It was more then ordinary dainety meatt, relishing like a roasting pigge."



Mundy's sketch, the only one, of his "fowle."

The bird in Mundy's description sounds like some sort of flightless rail. Rails (like their close relatives gallinules and coots) are usually marsh birds of secretive habits. Over the millennia, numerous species have been blown by chance storms to remote islands where often they survived, multiplied and, usually in the absence of predators, gradually lost the power of flight. But no such bird lives on Ascension today, and it was thought by some that Mundy's description







## *A flightless bird*

might apply to young sooty terns even though these have webbed feet, brown eyes and are hardly exceedingly swift.

Then in 1958, a team of British ornithologists went to study the breeding habits and ecology of Ascension's seabirds. Informed of some bird bones found at the bottom of two volcanic vents north of Sisters Peak, one of the island's high cinder cones, they explored these fumaroles, as they are called, and picked up skulls for identification.

Only later, at the British Museum, was it discovered that one of the skulls belonged to a small rail, but without the rest of the skeleton there was no way to know for sure if this was Mundy's bird. It was never given a scientific name in the hopes that the rest of its



The author heads for the volcanic cone where British ornithologists had found some bird skulls.

remains might sometime be uncovered. But no one returned to look for the rail bones: Ascension is a difficult place to reach.

I had been trying to get there for four years when, in late 1969, the Smithsonian's Museum of Natural History and the Oceanography Program sponsored a collecting expedition on Ascension to be conducted as part of my graduate research at Johns Hopkins University. In June 1970 I boarded a U.S. Air Force C-141 cargo plane bound for Ascension. Aboard the plane I met a Carl Coggins, an American who was working on Ascension and who promised to lend a hand. On the island, I was met by Major Jack Couch, the Air Force base commander, who also volunteered to help.

The next day Carl managed to acquire a truck and we drove down a dusty road out to Sisters Peak. On either side of the road were mounds of brown lava and clinker, almost totally devoid of vegetation. Most of Ascension's plant life has been brought in by man, yet even today the northwest side of the island is largely barren of signs of life save for a few lichens and sprigs of dry grass.

### *Into the graveyard on a frayed rope*

We parked the truck at a cinder quarry and took off on foot across the loose cinder hillside and craggy lava flows. After several hours of wandering around, poking into crevices and crawling into tunnels hung with jagged "lavacicles," we came upon the two fumaroles. The two low cones looked like gobs of mud just erupted from the earth and solidified shortly before our arrival. But no volcanic activity has been reported on Ascension since its discovery. We climbed up the crumbling lava to the rim of one fumarole. We peered down the gaping hole but it was late and we lacked climbing equipment, so we returned to the truck.

The next morning we returned to the fumaroles. After much discussion, and much hesitation (especially on my part), we secured a rope around a mound of lava and Jack went down. I followed, and a shower of loose clinker rained down around me. At the bottom was a dim chamber with a passageway which we followed into another chamber. Through the roof of the second chamber we could see another opening to the fumarole which, we decided, would be our entryway on subsequent visits.

On the far side of the second chamber, near the roof, was a narrow crevice. Jack climbed up and went through, reporting that at the end of the crevice was a drop of 10 or 12 feet into another chamber. We found an old frayed rope, perhaps left by the British 12 years before, and Jack let himself down. I lowered a flashlight and a cotton-filled box to him on a string, the latter in case he should find some specimens. Be-

fore long he called out that he had found some small bones in one corner of the chamber and, packing them in the box, he sent a few up carefully.

They were indeed the bones of a rail, mostly leg bones but with one wing bone that was proportionately very small. Jack picked up a few more bones among which were portions of two breastbones, both quite flat and definitely showing that the diminutive bird had indeed been totally flightless. There was no question in my mind but that this was Mundy's rail. There were many more bones still remaining, but thirst and heat had taken its toll for the day, and we decided to leave.

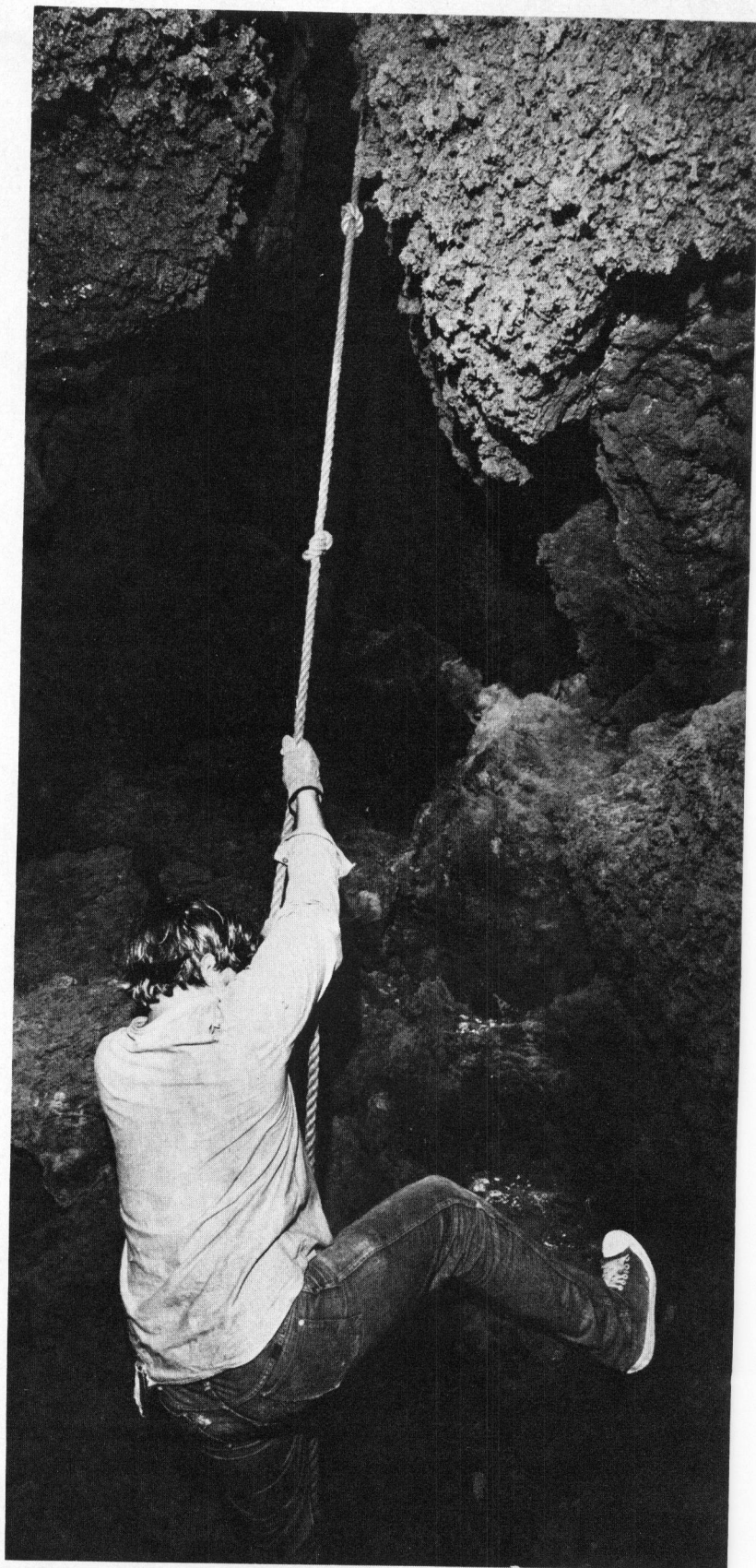
Three days later Jack and I returned to the fumarole and climbed down the narrower but more direct entrance. This time I accompanied him through the crevice and down the frayed rope into the last chamber. In a depression in one corner of the vault hundreds of small bones were scattered about. As it turned out, at least 32 birds had died in this graveyard of flightless rails. Doubtless the birds had fallen into the fumarole and, being unable to fly out, had wandered into the farthest recesses where they died.

It seems likely that the Ascension rail survived by eating the eggs and regurgitated food of seabirds and possibly the carrion beetles that feed on the inevitable carcasses associated with large bird colonies. Then man brought his rats and cats which most likely preyed on the rails and their eggs, as well as extirpating the seabirds which were the rails' source of food. The rail population was doomed.

#### *A respectable little bird*

I made two more trips into the fumarole. On the last, with Douglas Rogers, the curator of the Ascension Historical Society Museum, we recovered an intact skull: I had now all the elements of the skeleton—more than enough for a formal scientific description of the species. During my month on the island I collected other animal and mineral specimens, including a bonus of at least five species of shrimps and crabs unknown to science. These are now under study in the Smithsonian's Department of Invertebrate Zoology.

Now back at the museum I am poring over the dry relics of a long-dead bird. Among the world's priorities, the bones before me have perhaps very little significance, yet I cannot help but feel an infinite respect for this little bird. At some time in the past its ancestors crossed more than a thousand miles of open ocean to land on one of earth's harshest landscapes. In a new and hostile environment, it quickly adapted and for a while survived. But now what was once a tribute to the tenacity of life must be reckoned as one more memorial to the destructive thoughtlessness of man.



Fearfully, he says, the author lowered himself into a series of caverns in a volcanic cone.



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