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GONZALO PIZARRO'S TRAIL TO THE LAND OF CINNAMON AND ITS DENIZENS

WITH FOUR ILLUSTRATIONS

By ROBERT T. MOORE

By reason of the continual Rains, and moisture of the Earth, their woollen Cloths and linen being always wet, became rotten, and dropped from their Bodies, so that from the highest to the lowest every Man was naked, and had no other covering than some few Leaves. . . . So great, and so insupportable were the Miseries which Gonzalo Picarro and his Companions endured for want of Food, that the four thousand Indians which attended him in this Discovery, perished with Famine. . . . Likewise of the three hundred and forty Spaniards which entred on this Discovery, two hundred and ten dyed, besides the fifty which were carried away by Orellana. . . .—The Royal Commentaries of Peru, by Garcilasso de la Vega (Translated by Sir Paul Rycaut), p. 632.

Over the trail that Gonzalo Pizarro undoubtedly took, and into the Land of Cinnamon, our party of four Americans, consisting of Mrs. Moore and our four-year-old daughter Marilynn, Waddell Austin and myself, started gaily in an automobile from the city of Quito. After a week of city life in the capital, we were happy once more to be on our way toward the wide open spaces. Perhaps we were unduly light-hearted, but we had learned to discount the forebodings of city friends in Quito, who two years previous had prophesied the return of our bodies in an unsightly condition from the land of the head-hunting Jivaros. Although we had had experiences enough, when one recalls the constant rains, our camp-sites in swamps and three land-slides that obliterated our trail, nevertheless the Jivaros had no desire to take off our heads and proved to be harmless. Furthermore the two men of our new party had recently returned from the really trying experiences of the Sangay Labyrinth and the ascent of Mt. Sangay. At least the country we were entering had been explored, the trail was known to our Indians, however bad it might be, and we would not have to cut a way through with machetes into a maze of unexplored canyons, with a following of superstitious Indians. So, we set out gaily enough. Eight miles from the capital, we were halted at the bridge over the great Guaillabamba Canyon. A horde of Indians were repairing the road on the other side and a fall of debris rendered further progress by automobile impossible,

so we waited for pack animals, which were brought up by Waddell from a near-by village. Two experienced collectors were with us, Carlos Olalla and Teodomiro Mena, as well as the Indian cargiadores with their mules and burros. It is impossible within the space of this short article to recount our experiences with proper continuity or to give more than thumb-sketches of the great many species of birds encountered.

While we waited at the bridge, the last proud symbol of the civilization we were leaving, my mind wandered to the birds of Cumbaya and Tumbaco, the quaint villages through which we had just passed. Two years previous I had spent a delightful afternoon in the valley of Tumbaco hunting for nests of five hummingbirds. The giant of them all, *Patagona gigas,* had proved exceedingly shy and it was not until two weeks earlier, of this year, that I found its chosen haunts at an elevation of 1600 feet on the northern slopes of Mt. Chimborazo. His flight, so curiously like that of his distant cousin the swift, had led us from one huge flower stalk to another. I could still see those mullen-like stalks, fifteen feet in height with bayonet leaves, their dull blue flowers etched like blue candelabra against the ice-fields of the great giant of the Andes. *Psalidoprymna* with its appendage of sub-specific names, almost as long as its own seven-inch steering mechanism, had proved more friendly and admitted us to the secrets of its housekeeping activities. Several of its nests, placed behind tree-roots protruding from high banks, had been found throughout the valley. The short tail of the female made accurate steering possible through the tangle of roots, but the long tail of the male proved a hindrance in strong winds, bending almost double at sudden gusts.

The gem of the valley had proved to be *Chlorostilbon melanorhynchus melanorhynchus* with its glittering green breast-plate and golden crown. Frequenters of the flowers of the guava tree, the buzz of their tiny motors had been a common sound in the valley. Perhaps more startling had been the sudden displays of *Myrtis fanny* with its glorious blue-green throat and semi-lunar band of tyrian fire. Common as the bird is, fully adult males are scarce, and when obtained, an unending delight. Rarest of all was to come, the dullest of all Trochili. Described by Gould as *Pinarolaema buckleyi* from a specimen secured at Misqui in Bolivia, it had reappeared after forty years in the Chillo Valley, not ten miles from Tumbaco, and was believed by Dr. Oberholser to be a color phase of *Colibri iolata.* The discovery of this third specimen, after a lapse of thirty more years, so exactly like the illustration in Gould's Monograph, had raised once more the question of the validity of this non-iridescent quakeress of grays and mauves. And then my thoughts were brought back sharply to immediate problems by the clatter of the hoofs of our mules and the patter of Indian feet.

A half hour later we were picking huge pink button-balls from Mimosa shrubs near romantic Pifo. On the other side of the village relief was found from the burning tropical sun. Only a few miles from the equator, we were glad to climb to a grassy terrace high above the stream-bed, under a huge clump of swaying eucalypti. These trees have been imported into Ecuador from Australia and have become the chief source of supply for firewood. Lunch was interrupted by the sight of a beautiful tanager with yellow breast and rump and sky-blue crown. I realized it was *Thraupis darwini,* the same bird that had been collected in the Valle Tumbaco a few days previous, a species whose bill had immediately called attention to possible affinities with the exquisite new tanager of the Mt. Sangay Labyrinth. A few miles farther on we came to Paluguillo, the last *hacienda* of the central Andes

at approximately 9500 feet altitude, and then began the real ascent. Hemmed in by slopes of volcanic rock, the trail climbs to the grass-lands of the Paramo Zone and crosses several streams. I decided to try Marilynn out on the small burro, which the owner had claimed was "perfectly safe". But the burro had ideas of his own and the moment he was free with his new burden, bolted straight down a rocky trail to the edge of a boisterous stream. Reaching the bank he decided to jump and covered the stream with a tremendous effort. To our surprise the burro stopped on the opposite bank, turned around and—Marilynn was still in the saddle! When I caught up with her she exclaimed: "Daddy, I love it! Make him go faster!" Thereafter she rode an average of eight hours a day throughout the entire trip, and

Fig. 18. Camp-site to west of Guamani Pass at about 12,500 feet. The two mules on right belong to party of Indians from the Rio Napo, who were taking wild parrots to Quito.

the burro, apparently proud of his tiny mistress, decided to behave. Before dark we descended to a tree-covered shelf protected from the wind in a small arroyo beside a roaring torrent and hastily made camp for the night. A huge tree curved its arms over our tent and reached to the top of the bluff fifty feet above us. As Mrs. Moore opened an army trunk a terrific crash was heard in the tree-tops above us. She jumped just in time, as one of the mules hurtled down through the limbs and landed directly on the trunk.

Somewhat later, crossing Guamani Pass at 13,354 feet, we reached a romantic lake with an unromantic name, Sugchoscocha, whose waters for the first time in our trip were flowing east, into the Papallacta river and on towards the Amazon. Sinclair states that both this one and Lake Papallacta, four miles farther on, have been formed by lava dams, and adds: "The tree-line of the eastern slope may here be drawn at 11,400 feet". An abundant tree-growth and flowers proved that we had entered the Humid Temperate Zone. About five miles beyond the pass the trail

suddenly fronted a beautiful valley and we wound down a fuchsia-bordered road to the Indian village of Papallacta. After our experiences in the cold rains of the bleak Paramo the profusion of flowers in the valley seemed a paradise. The mountain sides are heavily covered with trees, the under-growth dense, tangled with vines and graced with ferns. Conspicuous flowers such as the great pink trumpets of the taxcus, *Tacsonia mollissima,* and the fuchsias, which here reach the proportions of small trees, were so profuse in favored corners of the valley that at sudden turns their draping masses looked like tiny waterfalls of pink or red.

We made the mistake of passing the one house of the village, which did not have a thatched roof, and kept on a half mile beyond the town to pitch tents in a

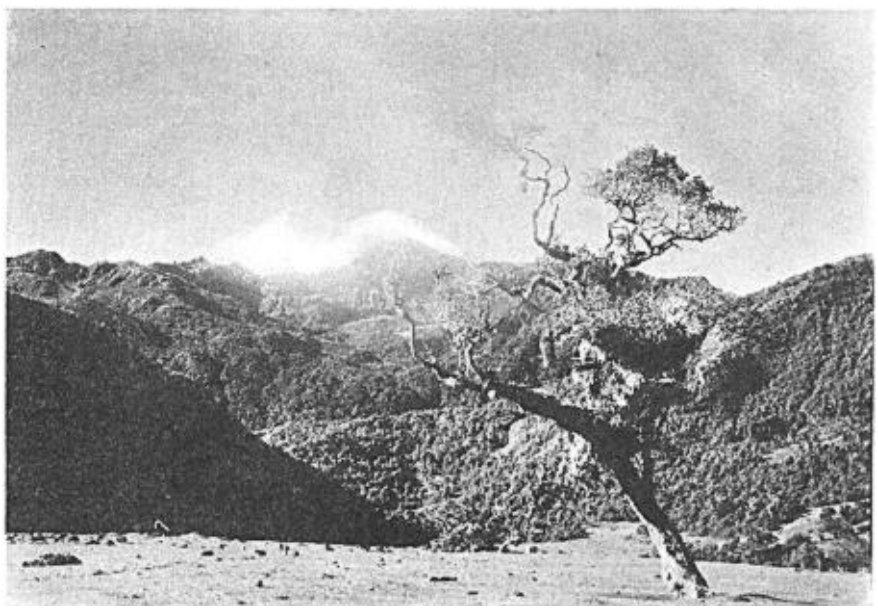

Fig. 19. Aged guanto tree in Baños Valley outlined at sunrise against humid temperate tree-growth at base of Mt. Antisana, 18,884 feet in altitude.

clearing, flanked by the forest. The next morning the *teniente politico,* wrapped in a brown smoking jacket with black braid and gesticulating, stalked up and down the road, obviously in a hostile mood. Behind was his Indian attendant who kept a dignified pace just five steps away. Later he announced to Teodomiro that we would not be permitted to hunt unless we showed our papers. As the papers had been left by mistake in Quito, I decided to have a talk with him. Receiving me in frigid fashion, he made me sit down, and when I admitted that I had no recent papers, proceeded to declaim a long story from the daily newspaper of Quito, El Dia. It turned out to be an interminable account, flowered with resounding adjectives, concerning our first ascent of Mt. Sangay, seven weeks earlier. When he had finished, he suddenly broke into a smile and greeted me by name, bowing suavely. Decorating me with Spanish titles of respect, he then offered to transport his own high-posted bed on the backs of his Indians to the valley of Baños above the water-fall, where we were planning to go the next day. He shook his head in a bewildered manner at my preference for the shaky cot of canvas.

The following morning found us climbing up the steep northern slope of the valley beside the Chorera Papallacta. Off-shoots of this rather imposing water-fall had made a mire of the trail. Apparently as an after-thought, the Indians told us that no one had ever attempted to take cargo-bearing animals into this higher valley! Endeavoring to lead my horse across the main stream above the water-fall, it began plunging desperately and soon was helpless on its side. It looked as if a rifle shot would be the only solution, but after an enormous effort the Indians got it on its feet and helped it to the natural meadow, which formed the floor of the narrow gorge. We were soon pitching our tent two miles up the enlarged canyon between a hot spring and a boisterous torrent of cold water. The muddy passage through

Fig. 20. Moss-hung guanto trees (*Datura sanguinea*) in Baños Valley. The light-colored objects on nearest tree are the twelve-inch orange flowers. Our collector, Teodomira Mena, is the standing Indian.

the southern throat of this Andean Yosemite was soon forgotten in the anticipation of easy camp-life in such pleasant surroundings.

Sinclair's survey gives the elevation of Papallacta as 10,333 feet. This would indicate an elevation of nearly 11,000 feet for the floor of the Baños canyon. The east and west walls are quite steep. The north end of it contracts into a narrow gorge, which the Indians stated was impassable. The only outlet was "over" the water-fall at the southern end. Down that way we could see the heavily wooded slopes of the far side of the Papallacta Valley, mounting up knoll after knoll, all heavily wooded, to the base of a giant mountain, which we later discovered was the celebrated Antisana. Clearly the tree-growth of the Humid Temperate Zone was being carried up to a high altitude, perhaps exceeding 12,000 feet. At Pallatanga on the western slope of the Andes, the upper limit of the Humid Temperate could not have exceeded 9500 feet. No doubt the heavier rainfall and the upsweep of heat from the Amazonian Basin accounts for the pushing upwards of this tongue

of rich forest association. Obviously we were established in the Humid Temperate Zone, but the growth about us gave a superficial resemblance to the Sub-tropical. The trees were heavily hung with moss as well as epiphytic and parasitic plant life. Although trees and shrubs were scattered on the valley floor, the growth along the banks of the stream was extraordinarily thick and almost impenetrable, particularly near the several hot springs at the upper part of the valley, whose constant steam may have had some effect in causing the luxuriant growth.

The "guanto" tree was the most conspicuous object in the valley. It is a tree member of the genus *Datura*, formerly called *Brugmansia sanguinea*, perhaps the most striking example of the group of so-called "trumpet flowers". Thick groves of these trees with moss-draped limbs created spaces of intertangled darkness along the stream. But a few stood out stark and bold in the center of the valley against the glittering ice-fields of Antisana, whose peak rose 18,884 feet into the clear blue and seemed to block the southern end of the valley in moments of sunlight. Many of these scattered trees had great gnarled branches and were blotched with huge masses of a lavender bromelia three feet in diameter. The beauty of the "guanto" tree lies in its enormous flowers twelve inches long and varying through all the shades of orange, yellow and pink. The Sword-bill, *Ensifera ensifera*, frequented them almost exclusively. Long as his seven inch bill is, this hummingbird can not reach the bottom of the corolla and must content himself with foraging for insects among the ribs of its orange-throated cave. *Ensifera* is a dauntless warrior, whose courage I had witnessed two years earlier, when its nesting site was discovered on the northern shoulders of Mt. Pichincha. For two hours these birds had darted at me with their powerful lances, as I explored their chosen tree, and frequently forced me to guard my head in precarious situations on the limbs.

The gorgeously colored red, blue and black tanager with scarlet cheek-mark *Poecilothraupis lunulata atricrissa*, was common in the valley. The pure scarlet under-parts created a startling effect in the denser gloom of fluvial associations. The larger and even handsomer tanager, *Buthraupis eximia chloronota* proved quite rare and its flash of gold, green and blue once brought me to a halt in my exploration of the gorge. Its relative of the Sangay Labyrinth, collected six weeks earlier, proved to be a new race of this form. Two other tanagers, *Poecilothraupis palpebrosa* and *Dubusia taeniata* were fairly common, but the most astounding color combination was that of *Piranga rubriceps*, whose scarlet head and throat, set off by a golden body and black wings, was the most beautiful medium-sized bird of the valley. Largest of all the tanagers, *Buthraupis cucullata cucullata* flaunted its golden breast and blue back from the higher tree-tops. Woodpeckers were scarce and only one was heard, the bronzy-backed *Veniliornis equifasciatus*. The Furnariidae were represented by the brown fern-tailed *Schizoeaca fuliginosa* and *Asthenes flammulata flammulata*, while *Margarornis perlata* displayed its golden tear-drops from the scattered bushes. The white-breasted and gray-headed *Cinclus leuconotus* proved a rather shy denizen of the streams. "Piloto" is confined to the darker depths of the torrent, where huge vines swing back and forth in the damp spray. Here its nest, resembling somewhat our White-eyed Vireo, hung daintily over the rush of powerful waters, and was secured only after several falls into the swirling flood.

Hummingbirds were represented by the greatest number of species and glittering bits of iridescence in the moss-hung gloom, where orange clusters of parasitic flowers starred the depths, gave frequent notice that this was the chosen abode of the Trochilidae. *Helianthea lutetiae*, with its green frontlet and purple throat patch, darted

here and there among the fuchsias. The black velvet abdomen of *Lafresnayea lafresnayi gayi*, vanished in the gloom. *Rhamphomicron microrhynchum*, golden-throated and purple-crowned, darted out from the margins of the thick forest. The emerald beauty, *Psalidoprymna gracilis gracilis* and *Vestipedes vestitus smaragdinipectus* proved that a flame of gold and purple iridescence could make one forget the barbarous appendages that man had attached to them.

What proved to be the mystery of our sojourn at Baños, was the identity of a glorious tyrian-tailed hummingbird with a glittering throat. When its nest was dis-

Fig. 21. Village of Papallacta and thatch-roofed Indian huts from near foot of Chorera de Papallacta.

covered immediately across the torrent from our camp, it was slated to be collected for identification, but the bird had its own ideas about this matter. Its nesting activities kept it constantly coursing over our tent and it seemed obviously easy to study its habits at leisure, wait for the laying of its egg and collect it just before our departure. But when the morning came to break camp, I waited impatiently for two hours in ambush near its nest, while the cargiadores were rounding up the mules and equipment was being packed. We had a long day's safari ahead of us with a final plunge through a dangerous morass near the height of the pass, and finally discretion compelled me to leave without securing the one specimen I felt I was assured. However, I had become sufficiently acquainted with the hummingbirds of Ecuador, after the experience of two different years in the field, to reduce the identity of this bird to two species. It certainly belonged to the genus *Metallura* and was probably *primolina,* which was fairly common in the valley. The only other possibility was *Metallura tyrianthina tyrianthina,* but the female of this species is so easily identified and I had found so many of its nests and watched both male and female at close range, that I am confident it could not have been this form. For its nesting site, the bird had chosen a tree about fifteen feet in height on the bank of

the stream. The tree was weighted with bromelias and an exquisite orchid with small lavender flowers. Among them was a large clump of moss six feet from the ground. Resembling somewhat a Parula Warbler's nest, the only opening in the moss was a small one to the nest, completely protected by another large clump overhead. The bird busied itself carrying bunches of a whiter moss, an inch in diameter, from various points in the vicinity. It was utterly fearless and without guile, and yet her fearlessness, inducing her to enter the nest immediately on alighting and to leave without warning, made close observation difficult. Her flight from material-sites to nesting-site was direct as a bullet in its course and almost as invisible. In fact she was frequently mistaken for an insect. Her closest relative, *Metallura atrigularis* of the Sangay Labyrinth, nests on roots of banks or in rocky niches of a cliff. This is not surprising, since *Metallura tyrianthina* nests both in trees and behind roots.

We had stayed in the valley for a week, hoping that the trail by the *chorera* would dry up, but the constant mists increased the mire, and, when we finally went out, four mules foundered at one time. Attempting to carry Marilynn out in my arms through a swamp on the west side of the water-fall, I fell with her in a deep mud-hole. At length we picked our way down the deep gorge among the heavy growth of ferns and vines which festooned all interstices. An exquisite view of Papallacta rewarded us just as we emerged on the more open slopes.

Sinclair's description of the route from Papallacta to Baeza along the ancient trail to the Napo, which is probably unchanged since Gonzalo Pizarro followed its tortuous wanderings four hundred years ago, is an excellent picture of this part of the trail. He writes: "Meanwhile we continued down the river to the confluence of the Quijos and the Papallacta, where was obtained a magnificent view of the gorge of the Quijos from the trail several hundred feet above the river. We also had our first view of Antisana, whose snow-capped summit just showed above the tops of near-by wooded ridges. A short distance below this point the south side of the valley of the Quijos is formed for several miles of great cliffs, over which tributary streams cascade". Due to the unexpected stay in Papallacta and the continuing rains, we did not reach Baeza, whose elevation is given by Sinclair as 6260 feet. It is stated by Chapman to be in the Humid Sub-tropical Zone. Here is the home of many of Ecuador's most beautiful hummingbirds, but the most exquisite one of all is found at Cuyuja, a stopping point on the way to Baeza. *Cyanolesbia mocoa mocoa* is, in my judgment, one of the handsomest of all the Trochilidae. Its purple throat patch and iridescent crown of golden green are only casual touches to set off the astounding tail, six inches of emerald and blue effulgence.

Most interesting to me of all the Trochilidae was the new species, *Chaetocercus cleavesi*. Although it was collected in other places, it seems incredible that it could have been overlooked by the numerous collectors who have operated at Baeza. In spite of the fact that four adult males and four females were obtained there by the Olallas in one week, only a few specimens seem to have been secured by other collectors. Its fiery gorget of pinkish purple and its tiny size, when coming head-on into the sunlight, make it resemble a flaming bullet. Almost the same size as the little mite of Cuba, *Calypte helenae,* it is one of the smallest birds of the world. This little gem will stand out as the most memorable of this exotic land of frozen volcanoes and flaming hummingbirds.

California Institute of Technology, Pasadena, California, February 17, 1934.