

# The Birds of Nosara

By Alexander Skutch

THE BIRD LIFE of Costa Rica is exceptionally rich and varied, even for a tropical country. Probably nowhere in the world are more kinds of birds concentrated in so small an area. Seven hundred and sixty-two species, including permanent residents and migrants, have been found in the approximately 23,000 square miles of the Republic's territory and along its shores. Although the United States south of the Canadian border has an area some 130 times as great, only 725 kinds of birds are known to occur there. All the countries of Europe, excluding the Soviet Union, can claim only 577 species.

There are several reasons for Costa Rica's extraordinary wealth of birds. The first is its strategic situation near the junction of two great continents with quite different avifaunas. Temperate North America has contributed, in addition to its annual host of migrants, such resident species as the Hairy Woodpecker, the Volcano Junco, and the Rufous-collared Sparrow. From South America, the "bird continent," Costa Rica has received the ancestors of a multitude of puffbirds, toucans, woodcreepers, ovenbirds, antbirds, manakins, cotingas, honeycreepers, and tanagers, and probably most of its 53 species of hummingbirds.

The second reason for the concentration of so many species of birds in so small a country is the great diversity of life zones and habitats that Costa Rica offers to them. From sea level the land rises to an extreme elevation of 12,580 feet on Cerro Chirripó in the Cordillera de Talamanca, on the higher summits of which one finds the northernmost examples of the páramo, a peculiar vegetable association characteristic of cold Andean heights in Colombia and Ecuador.

The plains and foothills on the wet Caribbean side of Costa Rica support magnificent rain forests composed of great trees laden with orchids, aroids, bromeliads, ferns, and many other air plants. Palms of all sizes, from dwarf species that cover the ground to those slender trunks which soar up into the forest canopy, grow in abundance amid the massive timber trees. This side of the country is richest in bird life, especially toucans,

jacamars, antbirds, cotingas, and other distinctly tropical species that are often hard to detect amid the exuberant vegetation.

The Pacific side of Costa Rica, south of the Gulf of Nicoya, is likewise rainy and its forests are hardly inferior in height and variety of trees to those of the Caribbean littoral. Although it shares many species of birds with the Caribbean lowland, its separation from the latter by the high barrier of the Talamancan Range has resulted in the evolution of a number of distinct species, including the Fiery-billed Aracari, the Golden-naped Woodpecker, and the Turquoise Cotinga. These and many other beautiful birds extend across the border into neighboring parts of Panamá, but their wide extension along the Pacific coast has been prevented by drier country. They are confined to this region of heavy rain forest by the Cordillera de Talamanca, the Pacific Ocean, the savannas of western Panamá, and the dry woodland of northwestern Costa Rica.

As one climbs from the coasts to the cool highlands, the character of the vegetation gradually changes, and with it the birds. The Costa Rican mountains, exposed to wind and rain from both oceans, are wet, and their heavy forests are laden with a vast variety of epiphytic growths, from liverworts and mosses to large trees perched upon larger trees. Appearing around 3,000 feet, oaks become more numerous upward, until their towering forms dominate the forests on the higher mountains. The visitor from North America may not at first recognize them, for their leaves have simpler outlines than those of familiar species, but their acorns are unmistakable. In these cool, dripping mountain forests many Andean types of birds reach their northern limit. Clad mostly in shades of brown and buff, lurking obscurely among moss-covered trunks and boughs, these shy birds challenge the bird watcher's skill. Brighter and easier to know are the resident wood warblers which, rare or absent in the lowland forests, become abundant in the highlands. Here, too, dwells the glittering Quetzal, the Western Hemisphere's most splendid bird. Surrounded by lowlands, the mountain

chains of Costa Rica, which extend into western Panamá, form an isolated highland area that contains numerous species of birds found nowhere else.

The driest part of Costa Rica is the northwestern quarter, containing the Province of Guanacaste and part of the Province of Puntarenas. Here, in the Pacific lowlands northward from the mouth of the Gulf of Nicoya, the dry season is long and severe, lasting from about November to May. Here, except on low land with a high water table, the forests are lighter and lower than in the rest of Costa Rica, and the largest trees impress one by their wide-spreading crowns rather than by their height. Thorny plants are more abundant, and in spots cacti grow. In the dry season many trees lose their foliage, and the ground becomes almost bare of herbaceous cover, as in winter in the North. As though to compensate for loss of verdure, some of the most beautiful trees, such as the golden-flowered Guayacán (*Tabebuia chrysantha*) and the pink-flowered Roble de Sabana (*T. pentaphylla*) now blossom profusely. Although comparatively arid, this northwestern quarter of Costa Rica is by no means desert, and in the wet months from May to October it becomes lushly verdant.

Isolated from the drier regions of South America by wet belts stretching from coast to coast in Panamá and southern Costa Rica, the semi-arid Pacific coast of Middle America, extending from the Gulf of Nicoya northward through Nicaragua, Honduras, El Salvador, and Guatemala into México, has developed a distinctive set of animals, known as the Central American Arid Tropical Fauna. Although not so rich in species as the rain forests, this drier country is the home of some charming birds, with the advantage that they are, on the whole, easier to watch and to identify than are the feathered inhabitants of the dense humid forests. Thus this region is especially favorable for beginning the study of tropical American birds.

Situated at the southern end of this comparatively dry coastal belt, Nosara receives more rain than the districts to the north. It lies in the Tropical Moist Forest Zone of the widely used Holdridge classification of life zones. Intermediate between the dry and the excessively wet regions, this zone has a climate that many people find more agreeable than any other in the tropical lowlands. Although the bird life of Nosara is predominantly that of the drier belt to the north, with which it is continuous, it shares a number of species with the wetter parts of the Pacific coast to the south, and it might receive more if it were not separated from this humid zone by the Gulf of Nicoya.



### *Nosara's Varied Terrain*

The Nosara property of 3,500 acres, now being developed as a resort community and wildlife sanctuary, has a uniquely varied terrain. The ocean front, two miles long, consists largely of wide beaches of fine, light, colored sand, interrupted here and there by picturesque rocky promontories that rise abruptly above the surf, and by outcrops of shelving rock which at low water hold tide pools inhabited by tiny fish of the most intense blue and other fascinating creatures. To the north, the property is bounded for three miles by the Río Nosara, here flowing broad and smooth after its tumultuous descent from the mountainous interior of the Nicoya Peninsula. At the river's mouth is a lagoon or estuary, where Olivaceous Cormorants and Mangrove Swallows rest on branches of dead trees grounded in the shallow water. This lagoon is separated from the open sea by a long sand spit where terns, gulls, skimmers, and a variety of shore birds rest or forage. Nearby is a stand of tall red and black mangrove trees, on ground firm enough to wander over while one searches for the many interesting birds that live there: Common Black Hawks, Bare-throated Tiger-Herons, gem-like Pygmy Kingfishers, chestnut-headed Mangrove Warblers, Rufous-and-white Wrens. The leafy crowns of the tall mangrove trees are frequented by many birds of inland woodlands; in May they are tuneless with the simple songs of Yellow-green Vireos.

Inland from the beach and the river the terrain consists of wide, level or gently rolling areas separated by abrupt ridges, down the higher of which picturesque rivulets tumble. The more level land is at present largely in pasture, where grazing cattle and horses are attended by white Cattle Egrets and black Groove-billed Anis. Spotted-bellied Bobwhites wander over the grassland, above which White-tailed Kites hover, scanning the ground for insects and mice. Many tall, massive feather palms grow on this lower land, in places in such profusion that one wanders through a forest of them, among elegant Black-headed Trogons, raucous, crested Magpie-Jays, melodious Banded Wrens, and big, sociable Rufous-naped Wrens. Depressions in the lower land are occupied by small marshes and ponds, where long toed American Jacanas walk lightly over the floating vegetation, or fly ahead, to alight holding their yellow, spurred wings conspicuously above their backs.

Some ten miles of motor roads have been constructed on the Nosara estate, chiefly along the tops of the lower ridges, from which one enjoys magnificent views over the wide-spreading meadows, to the high

mountains of the interior of the peninsula or the vast shining expanse of the Pacific, with long rollers breaking on the sandy beach. From the roads one may follow valleys back into the higher hills, with the prospect of meeting, amid the luxuriant vegetation along the stream, some of the birds of more humid regions, such as the Little Tinamou, the Little Hermit Hummingbird, the handsome Blue-diademed Motmot, or the Gray-necked Wood-Rail. Or, if agile and energetic, one may scramble up the steep wooded slopes in search of such woodland birds as the Collared Aracari, the Lineated Woodpecker, and the elegant Long-tailed Manakin.