BIRDERS' BOOKSHELF

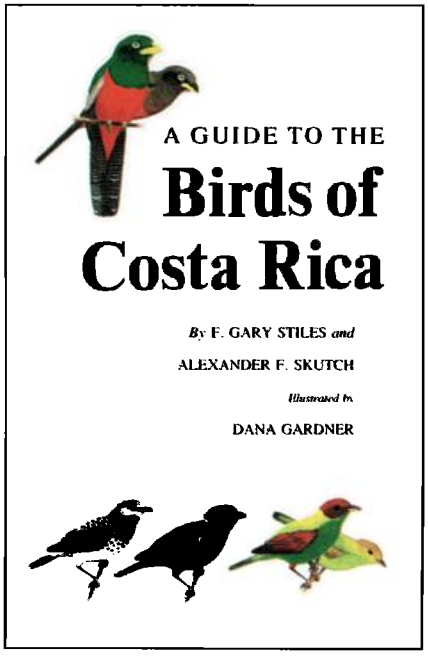
A Guide to the Birds of Costa Rica
F. Gary Stiles and Alexander F. Skutch. 1989. 656 pp. Comstock Publishing Associates, Cornell University Press.

So, you have birded over much of the United States, and after southeastern Arizona and south Texas, you know you want to go to the tropics. Overshadowing a tropical birding trip, however, are mental images of machine-gun-ringed airports, reports of nasty customs officials who won't let you enter with your camera unless you pay a bribe, and memories of newspaper articles about tourists being hassled repeatedly. Do you forget the tropics? Absolutely not!

There is a small country about the size of West Virginia, located in Central America between Nicaragua to the northwest and Panama to the southeast—it is Costa Rica, and it is the jewel of the birding world. Costa Rica is a democratic country that is proud that it does not even have an army. It enforces its seat belt law. It enforces its anti-litter law. And, even more to the point, it has over 850 species of birds that are now covered by an excellent field guide. Written by F. Gary Stiles and Alexander Skutch, both long-term residents, and illustrated by Dana Gardner, this book is the latest of the outstanding new neotropical guides to appear recently.

Costa Rica may be small in size, but it is incredibly diverse. Because of its size, one could go birding in a different habitat every day if he or she wishes, but even a preliminary trip should be planned for at least a week or more. The book begins with a detailed discussion of this diversity, the most dominant of which includes the four mountain massifs that form the "backbone" of the country, and reach elevations of 12,530 feet (3820m) on Cerro Chirripó in the Talamanca Mountains, the highest point in the country. There are 11 black-and-white photos to show the general diversity of the country, and an additional 24 to illustrate various habitats.

Each of the four mountain ranges is distinct. The northwesternmost, the Cordillera de Guanacaste, consists of four relatively young volcanoes that still retain typical conical volcano shapes, although only one is still active. The mountains are basically forested, but extensively cutover on their lower slopes; certain birds endemic to the Costa Rican-Panamanian highlands reach their northernmost limit in the elfin forest on the



peaks of certain of these volcanoes, none reachable by road.

Southeast of these peaks is the Cordillera de Tilarán, a heavily forested range that is made up of very old volcanoes that no longer retain much of their shape. Although reaching only about 6000 feet (about 1800m), exposure to winds and heavy rains at the summit has produced extensive elfin forests that harbor many high-elevation species at lower-than-normal elevations. In the Cordillera de Tilarán is the highly successful and world-famous, privately owned Monteverde Refuge, probably the easiest place in the world to see the fabulous Resplendent Quetzál!

Continuing southeast, the Cordillera Centrál is made up of four large volcanoes that dominate the landscape, especially when viewed from the Valle Central, the site of the capital city of San José. Volcán Irazú began a violent period of eruption in 1963, but quit two years later and has been fairly quiet since. Volcán Poas is also active, but presently quiescent, and Volcán Barva is not presently active.

These volcanoes have cloud forests at their summits. The slopes facing the central valley are mainly deforested, planted in coffee and other crops or used for pasture for dairy farming. The wetter Caribbean-facing slopes are still more extensively forested.

One large section on the slopes of Volcán Barva has been protected as the Parque Nacionál "Braulio Carillo," one of the largest areas of mountain-slope forest in Central America Primarily through private efforts, forests connecting the Braulio Carillo area to the lowland forest at La Selva (a research station run by the Organization for Tropical Studies) were purchased to save an incredible sweep of habitat that begins at volcanic peaks and ends in steamy lowland jungles This is a unique in Central America.

Southwest of these four volcanoes is the Cordillera de Talamanca, an uplifted, non-volcanic range that stretches southeast into western Panama. Most of the forest above 6500 feet (1980m) is still intact and is protected in the large Parque Nacionál la Amistad, theoretically shared with Panama. The higher elevations of the Costa Rican part of the Talamancas are reached along part of the Panamerican highway and are home to many birds endemic to the highlands

The Pacific side of the mountains is covered with a seasonally deciduous "dry" forest in the northwest, that rather abruptly changes to an evergreen forest south of the Río Tárcoles The dry season in the west is roughly

December to April, but the southwest is much wetter, with a dry season of only two or three months. The dry forests of the northwest are home to northern species, such as Turquoise-browed Motmot and Long-tailed Manakin, that reach their southern limit there. The wet, evergreen forests of the southwest form an evolutionary island shared with adjacent Panama. Birds such as the Orange-collared Manakin, Black-hooded Antshrike, and Yellow-billed Cotinga are endemic to the region, and one, the Black-cheeked Ant-Tanager is found only on the Osa Peninsula, and a bit of its mainland base, in Costa Rica.

The Caribbean lowlands are more uniform than those of the Pacific, originally being covered mainly in lowland rainforest and having extended dry periods in February and March. Even this dry period is subject to local and annual fluctuations. Most of the birds in the lowlands are more widespread, some even occurring from southern Mexico to western Ecuador.

These are the main habitats, but there are many others that cover smaller areas, such as the blackwater swamps, the mangroves of the Caribbean and Pacific coasts, the incredible beaches of both coasts that are so important to tourism, the several large isolated valleys that are rare important agricultural centers, the Nicoya Peninsula with its low mountains, the marshes of the Tempisque river valley, and others. Mountain rain shadows, low passes, isolated water currents, and other very local occurrences can influence small areas, which in turn produce local areas of habitat for specialized flora and fauna. Diversity is definitely the key word when explaining Costa Rica.

In addition to the detailed descriptions of the habitats, Stiles and Skutch discuss climate, conservation, birding, and bird finding. But, of course, most of the book is dedicated to the information necessary to identify each of the species known to occur in Costa Rica.

Each family of birds is introduced by a family account. These are quite detailed and extremely well written. Although I'm sure the authors did not intend the accounts to be reference sources, they are filled with information and would be very useful to anyone looking for information on any bird family occurring in Costa Rica. The information is compiled from many sources, including the authors' personal experiences. The various sections of the species accounts are also explained and clarified.

In general, the English names in the *names* section are those used by the latest American Ornithologists' Union checklist, but in several instances the authors have used what they believe to be a better name. They then give the AOU name in a "notes" section at the end of the account. Scientific names are also those used by the AOU, but in certain cases an alternative AOU name, indicating an alternative taxonomic treatment, is given in the "notes" section. No taxonomic novelties are adopted in the book. A recommended Spanish name is also given. If one did not exist, one was carefully invented, in consultation with scholars familiar with the problems of coming up with a name in a language that exists over as wide an area as does Spanish. Finally, one or more Costa Rican names are given where applicable.

The *description* section begins with information that may be useful to people who have the bird in hand, including the length, in inches and centimeters; the weight, in grams and kilograms, and for certain species, even the wing formula. Almost all of this information is taken from specimens and mist-netted birds in Costa Rica. The description then gives an indication of the shape and general aspect of the bird, and often gives one or two key field marks. This is followed by plumage characteristics, indicating differences in sexes and ages where applicable, and soft-part colors (eye, bill, eyering, facial skin, bare throat, feet, tarsi, etc.).

The next section, *habits*, is probably the most important one in the book, and it is because of the long-term commitment to note-taking by Stiles and Skutch and certain colleagues that this section is so incredibly complete and accurate! It is here that one finds out such things as what stratum of the forest a bird inhabits, how it forages, what unique or peculiar habits it has that may aid identification, whether the bird is a solitary or a flocking species, or with what plants it tends to be associated.

The following section, *voice*, is also extremely important, and it, too, is comprised of information gathered in Costa Rica from Costa Rican birds. The authors have tried to describe the most frequently heard and diagnostic vocalizations in simple, descriptive terms. If the bird is not known to vocalize in Costa Rica (many seabirds, for example) no information is given.

A *nest* section follows, and gives information on the nests and eggs, if known. All too often the statement "unknown" appears, indicating how much of many species' life histories is still to be learned. If the information is available, but not from Costa Rica, it is put in parentheses.

The *status* section tells what part of the country a species inhabits, the elevations inhabited and how it differs in different regions of the country, the times of the year a species is found in the country or in a particular part of the country (as in the case of elevational migrants), and finally, the "abundance" of each species. This last category is highly subjective, but carefully explained. The authors are quick to point out that they base their information on the likelihood of seeing or *hearing* a species on a given day in the correct habitat, and that they take into account such criteria as territory size. Thus, a pair of eagles in several square miles of habitat may get the same ranking as a pair of hummingbirds in an acre or two of habitat. The average birder will probably be inclined to think that most of the abundance notations are too liberal.

Finally, the *notes* section gives alternative taxonomic treatments, alternative English names, or indicates that a species closely related to the one under discussion may occur in Costa Rican territory even though it has yet to be recorded, and indicates where it would likely be found. Also included is an illustrated glossary of terms. Most are found in any field guide, such as "wingbar" or "gorget," but in the tropics there are far more plumage patterns and odd structures that need to be identified.

There are a few items that would have been valuable additions to the guide. One of these, even in an abbreviated form, would be some sort of a key or guide to neotropical families. One of the most frustrating experiences to the beginning tropical birder is to be faced with a bird or flock of birds and not have the least idea where to begin to look to start the process of identifying them. In a quick perusal of the plates section of the book, I counted 20 families that do not occur north of Mexico, and noticed members of many "familiar" families that do not resemble their North American counterparts. Even more important to me, however, would have been a section entitled "Stop, look, and listen"—and added to that, "Think and use common sense." When one is getting into a seemingly bewildering avifauna, it is *so* important to make sure you know such things as what habitat you are in, at what elevation you are, what time of year it is, what side of the mountains you are on, and other basics.

Costa Rica can easily be subdivided into Caribbean, Pacific, and montane: Habitats can be broken down into wet, dry, open, forested, etc. And forested habitats can be subdivided into deciduous or evergreen, tall or scrubby, epiphytic (bromeliads, orchids, ferns, etc. that support themselves on tree limbs and other such places). By keeping in mind exactly where one is, the identification possibilities can be narrowed down very quickly.

We are always told that a picture is worth a thousand words. In the tropics, and in this book in particular, the words are just as important as the pictures. This book is packed with information to make the identification of the birds a much easier task. This is information that has been painstakingly collected and compiled in Costa Rica over many years, both in the field and the museum, by the authors. This is information that should be read and used. With an avifauna of more than 850 species, Costa Rica is not the place to merely go and try to identify birds by flipping through the plates.

There are 52 plates by Dana Gardner of the Western Foundation of Vertebrate Zoology; 50 of them depict the majority of the species, but two have been added to include species new to the avifauna since the main plan of the book was formulated.

After thinking about the real purpose of the plates, and discussing them with colleagues, I realized that this is a field guide, not a book to show off the birds as they might be shown in a handbook. For once, the reproduction does not seem to be an issue. I was told that the artwork was done on a flexible surface, which allows it to be carefully placed around a scanning drum, which in turn scans the page with a laser beam and results in the production of the necessary color separations. With these done directly from the original work, there is much less danger of having color shifts than there is when employing the intermediate stages. In my copy, the colors are bright and the registry is "perfect." Most of the birds are grouped with their relatives, but some are shifted, such as the non-black blackbirds, to place them with birds that resemble them in the field. Since most of the birds added in recent years are from a variety of families, a close relative is usually placed on one of the new plates with the recent addition. This means that a few species, such as the Cave Swallow, which is on plate 52 with the Cliff Swallow, appear on two plates. The second depiction is often a different pose or a different plumage, so it is not bothersome.

Gardner was the sole illustrator. His work spans a period of ten years, and that is apparent in the quality of the plates. From the work in this guide, as well as work in other books, I would guess that Gardner likes to paint passerines more than non-passerines. The plates of the smaller, more brightly colored birds such as tanagers, warblers, and antbirds are much more alive and well drawn. To me, the plates that depict the hummingbirds and trogons (pls. 23–26), the smaller flycatchers (pl. 37), and those that depict the vireos and warblers, including many northern migrants (pls. 40 through 43) are the best in the book. I suspect that they were either the last ones done, or they were done a second time as the production of the book dragged on. In general, my biggest criticism is that the shapes on some birds are not really correct, scattered examples are the overly pointed wings of the flying ducks on plates 7–8, the overly big-billed and bulky Slaty-backed Nightingale-Thrush (genus *Catharus*) on pl. 38, that has the same shape and build as the Pale-vented and Clay-colored Robins (genus *Turdus*) on pl. 39, the Yellow-billed Cacique on pl. 44 that has the bill the same length as the tail, and the Slaty Finch on pl. 49 that has the bill depicted with a curved culmen and has the tail too long.

I was also disappointed to see that the tails of certain of the *Basileuterus* warblers, especially the Rufous-capped, Golden-crowned, and Three-striped, were not cocked up a bit, as they are all described as "tail waggers" and this is an obvious and useful field mark.

Gardner's birds are neatly and carefully organized into groups to be most useful for comparisons of colors and patterns. I guess we are spoiled by the ever-increasing quality and divergent styles in field-guide plates. We must not, however, forget that the plates are not really there for us to "ooh" and "ah"

over, they are there to help us identify birds that we see. In this context, the plates by Dana Gardner are excellent and do exactly what they are intended to do. I must say that it is too bad for any artists to have work published that spans several years; the comparison will always be made between the better, newer pieces and the older, not-necessarily-the-best pieces. My own older work also seems so amateurish and some of it is dreadful, so it is just part of life to have to live with this material.

A Guide to the Birds of Costa Rica is an outstanding book and makes a birding trip to Costa Rica one of the easiest trips to any tropical location. In one sturdy volume, one can read about and look at excellent plates of all birds known to have occurred. At last there is also a book that treats a migrant from the north or south as a Costa Rican bird while it is in that country. This is a book to be read and used, not one to merely have the plates ripped out and used alone—that won't work! Its price is a bargain. A month in Costa Rica did not damage the binding on my book, but with the cold, wet, and hot, dry climates, as well as the need to write in any good book, I suggest buying one copy for the field and one for the home shelf. This book is a model for a field guide to a complicated avifauna. It will be hard to beat!

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STATEMENT OF OWNERSHIP, MANAGEMENT, AND CIRCULATION

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(signed) Susan Roney Drennan, Editor