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## Forest in the mist

## (Last in a series)

When people think of ecotourism, the first place that comes to mind is the Galapagos Islands. Not far behind, however, is the Costa Rican cloud forest reserve of Monteverde. Established in 1972,



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OUR CHANGING SEASONS Drew Monkman

the diverse flora and fauna and because, for many years, my Grade 4 pupils had participated in fundraising projects to help expand and better manage the preserve. It now covers an impressive 10,500 hectares

World tropics. I

and attracts more than 70,000 tourists a year. So, when I learned that the Centro Panamericano de Idiomas had a school here, I jumped on the opportunity to both continue studying Spanish and also enjoy the area's amazing natural history.

Cloud forests grow on mountain ranges and are characterized by their high level of humidity. Warm, humid ocean winds coming off the Caribbean are forced upwards by the mountains until they reach an altitude where they cool, condense and form a thick layer of clouds which shrouds the forest in mist. The near-constant damp, humid conditions allow for abundant diversity in all realms of the flora and fauna. In the constant battle for sunlight, every square inch of open space on the trunks and branches of the trees is festooned with ferns, bromeliads, orchids, vines, and mosses. Some 400 species of birds have been recorded here including 91 species of North American migrants, many of which breed right here in the Kawarthas. The flagship species of the preserve is the famed resplendent quetzal which resides here for most of the year.

After several trips to the tropics, I've learned that it's always best to hire a guide when exploring a park or preserve. As was my pleasure to discover, Monteverde has some of the best guides in the business. Completely bilingual, extremely knowledgeable, brimming with enthusiasm and equipped with the best scopes and binoculars available, the guides here are actually all from the local community. This is a testament to how far environmental education and awareness have come in this area, and bodes well for the future. As we walked along the trail, the exotic songs of grey-breasted woodwrens, prong-billed barbets and slaty-backed nightingale-thrushes wafted through the mist. Above us, mixed flocks of tanagers, redstarts and spinetails foraged in the dense foliage. Fleeting glimpses were the best we could manage. At one point, a pair of emerald toucanets flew onto a branch just above our heads, their green plumage blending almost perfectly with the heavy cover of leaves. Roy, our guide, pointed out numerous fascinating plant species as well. These included sleeping hibiscus with its brilliant bellshaped flowers, and wild impatiens

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Hummingbird feeder action at Monteverde.

Drew Monkman, special to The Examiner

which grew in profusion along some sections of the trail. A wide variety of orchids, many growing as epiphytes high up on branches, also added splashes of colour. Monteverde is touted as having more orchid species than any other preserve in the world, with 34 of its 500 species only recently discovered.

Roy also explained how the bromeliads growing on the branches of the trees provide a veritable buffet of food and drink to the preserve's monkeys. They not only eat the leaves of the bromeliads and the numerous insects that the plants attract, but the monkeys also dine on frogs that come to lay their eggs in the water that collects in these plants. Some bromeliads can hold over 20 litres of water! Monteverde is home to an incredible 161 species of amphibians. Unfortunately, one species, the Monteverde-endemic golden toad, has already become extinct When I asked Roy to explain how climate change is affecting the Monteverde area, he said that there is now a much more pronounced difference between the dry and rainy seasons, and that both droughts and flooding are much more common. Clouds are not forming at lower elevations the way they used to, either, and some areas are drying out. It is feared that some species, certain frogs and orchids for example, will not be able to survive these longer dry periods. The golden toad's disappearance is now thought to be as a result of climate change. Our next stop was at the base of a gigantic 400-year-old strangler fig tree. This is a very important species because its fruit attracts a huge variety of birds and mammals. Strangler figs begin life as epiphytes — plants that grow on the surface of another plant when their seeds, often bird-dispersed, germinate in crevices in the canopy of another tree. The

seedlings grow their roots downward, reaching the ground in about five years. The roots slowly envelope the host tree, eventually killing it. The strangler fig, however, remains as a freestanding tree in its own right.

The walk concluded at a gift shop just outside the park entrance, where at least a dozen hummingbird feeders were buzzing with activity. Just like the earlier trip at La Paz Waterfalls, it was hard to know where to look; there were just too many birds.

For my last full day in Monteverde, I decided to visit the "ranario," or live frog exhibit. I wanted to see the red-eyed frog, a species which adorns so much of Costa Rica's tourist publicity. After an informative tour in which I learned about the multiple threats that the country's frogs are facing, I stopped in the gift shop to look at a checklist of the birds of Monteverde. Now one of the joys of traveling is that serendipitous events can often occur. Today would be one of those days Noticing what I was reading, a Costa Rican man, Allan, approached me and, in near accent-free English, said there were interesting birds out in front of the building and that maybe I'd like to see them. After explaining that he was keen but by no means an expert, he grabbed his binoculars and we headed outside. All of the bird action was happening in a medium-sized tree, laden with small, orange fruit. I knew that a good birding strategy in the tropics is to just stay put when you see birds coming to a fruit tree. I had just never tried it. Well, as it turned out, we ended up spending the next hour and a half simply standing in front of this tree — in the rain much of the time recording no fewer than 16 different species of birds. The first birds to catch our attention were a pair of red-legged

honeycreepers. Their long, decurved bills stood out clearly in silhouette and made identification easy. Beside them were two other similar-sized birds but with a short, straight bill. When the light improved, Alan and I compared the field marks we could see and together agreed that they had to be scarlet-thighed dacnises, a species that combines electric-blue upperparts, black underparts and red thighs.

Sharing and comparing the field marks of an unfamiliar bird with someone else is definitely one of the joys of birding. This is especially so in the tropics, where there are so many unfamiliar species that can be quite similar. Having another set of eyes to help you note all of a bird's features is always helpful. Often, one person will have seen an important field mark that the other will have missed. Working together, it is usually then possible to agree on the

alluring soundscape. The harsh chattering of orange-chinned parakeets and the rich toots and trills of rufous-and-white wrens were like nothing I'd ever heard before.

Alan, who was born and raised in Monteverde, told me he had gone to the English-language Quaker school in Monteverde and then on to a Quaker college in Indiana. Like so many Costa Ricans I met, he had a quiet personality which completely contradicted any machismo stereotype. The other thing that struck me was the sense that he had all the time in the world, and appeared happy simply spending the afternoon showing a tourist the local birds.

Next, we decided to try another location behind the ranario. We walked along a shaded, streamside path and watched as a slatybacked nightingale-thrush searched for food along the water's edge. The path led to a large manicured garden. Alan immediately heard the dry, almost froglike croaks of toucans. He soon picked out three individuals perched on the dead branches of a distant tree. Although it meant getting nearly soaked, we also got great looks at a yellow-throated euphonia, a masked tityra and, best of all, a golden-browed chlorophonia. The latter is a stunning combination of emerald green and intense yellow. The afternoon was truly memorable, and I hadn't even planned to go birding! It was the perfect end to a great trip. Thanks to CPI, I was much more comfortable in Spanish, the people I'd met were wonderful, and, as I've tried to explain these past three weeks, the natural history I experienced was nothing short of spectacular.

appropriate identification.

Although many of the birds feeding in the tree were common species such as clay-coloured robins, band-tailed pigeons, bluegray tanagers and brown jays, other, less common visitors made an appearance as well. Many of these presented identification headaches, even with two people looking at the same bird. Luckily, a large part of bird identification in the tropics has to do with geography. Simply stated, location is everything. Most species have fairly limited ranges, especially in terms of elevation. Looking at range maps, therefore, really speeds up the identification process. For example, by referring to the field guide maps, we were able to determine that we were looking at a yellow-bellied elaenia instead of a lesser and a buff-throated saltator instead of a black-headed.

The whole experience of this particular afternoon was enhanced by the soothing clouds that drifted by, almost at eye level, and by the

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