## LIVING

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## Immersed in Costa Rica

I had the pleasure this past July of spending two weeks in the fascinating Central American country of Costa Rica. Straddling the land bridge between North and South America and subject to warm tropical sunlight and abundant rainfall, this tiny country of four million people boasts an exceptionally high diversity of plant and animal life. Although the main purpose of the trip was to attend a language school in order to improve my Spanish skills, I also made a point of observing as much of the flora and fauna as possible. Partly because so

many of our so-called Canadian birds — yellow warblers, Baltimore orioles and rose-breasted grosbeaks, to name a few — overwinter here or at least pass through in migration, I have always wanted to learn more about the natural history, culture and language of this country.

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I spent the first week of the trip in San Joaquin de Flores, just north of the capital of San Jose. For the second week, I headed north to Monteverde, a cloud forest preserve situated in the mountains of northwestern Costa Rica. The Centro Panamericano de Idiomas School (CPI) has a campus in each of these locations as well as one at Playa Flamingo on the Pacific coast. For anyone wanting to learn Spanish, I would highly recommend CPI.

In order to become as completely immersed in the language as possible, I also chose to board with a Costa Rican family. This proved to be a wonderful experience, both culturally and linguistically. When you have no recourse to speaking English, it's amazing how fast your language skills improve!

Getting to the school in San

Joaquin each morning involved a 20-minute walk. The rich smell of the air in the morning sun and the stunning view of the surrounding mountains with their patchwork of forest and small coffee farms made for a delightful beginning to the day. The streets were a veritable botanical garden of trees, shrubs and flower gardens, most of which appeared meticulously cared for. There was an amazing variety of species including palms, hibiscuses, philodendrons, heliconias, orcinas, trumpet-vines, monsteras, cacti and agaves. As for the fascinating array of brightly flowering trees and shrubs, I couldn't even begin to put names to them.

Given the abundant blossoms everywhere, it was not surprising that there was also considerable butterfly activity. Among the few I could identify were the orange Julia butterfly and the large, allyellow orange-barred sulphur. Also common were postman butterflies, a black, orange and white species that is commonly seen in butterfly conservatories in Ontario. The postman caterpillar eats passionflower leaves which render the adult poisonous to predators. As with monarch butterflies, the postman's bright colours warn birds and other predators to find food elsewhere.

You cannot go far in this country with noticing the bird activity, even in built-up areas. Long-tailed grackles signaled their presence everywhere with a variety of loud, raucous calls and whistles. Not to be outdone, noisy flocks of crimson-fronted parakeets flew about in tight formation, flashing emer-



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Drew
Monkman's
column returns

in the fall.

ald green as they would pass by at high speed. Rufous-collared sparrows hopped about in gardens and along roadsides, pairs of blue-grey tanagers flew from tree to tree, while clay-coloured robins, Costa Rica's national bird, searched for food on lawns. On overhead wires, flycatchers such as tropical kingbirds and great kiskadees sat out in the open, showing no fear of passersby. A glance skyward almost always produced blue-and-white swallows, white-collared swifts and the ubiquitous black

and turkey vultures. Occasionally, a white-tailed kite soared overhead as well.

Because my classes during the first week were mostly in the morning, I had the afternoons free to go on some of the many excursions that were offered. The first outing I chose was to the National Institute of Biodiversity (INBio) in nearby Heredia. The institute was created to literally catalogue all of Costa Rica's plant, animal and fungi species. New species are still being found. INBio also serves to promote a greater awareness of the value of biodiversity and to help further protect the country's natural areas. Researchers here are also looking for genes and chemical substances present in plants and other organisms which may have applications in areas such as agriculture, medicine and biotechnology.

INBio also has its own park (INBioparque) which serves as a great introduction to the natural history of the country. Guides take visitors along trails through both rain and dry forest and provide an overview of the flora and fauna found there. Amazingly, the forests were actually planted and only eight years ago. Kapok and cecropia trees, key rainforest species, are already higher than telephone poles. Our guide explained how Aztec ants are the exclusive tenants of cecropia trees and "pay rent" by protecting the tree from other insects who might otherwise feed on its leaves. Just touching the leaves provokes an aggressive response on the part of the ants. The leaves of the cecropia, also known as trumpet tree, are also the preferred food of able to see. We also learned how castor beans, often grown and harvested through subsistence farming, are now giving hope to the prospect of large-scale biodiesel production and hopefully a better way of life for many Costa Rican farmers.

Another day, I took a boat trip down the Rio Sarapiqui, located in the Atlantic lowlands on the Caribbean side of the country. On the way there, we passed through Braulio Carrillo National Park, and were awed by its unbroken blanket of virgin rainforest extending as far as the eye can see on both sides of the road. The park's 2002 Christmas Bird Count gives an idea of the incredible bird diversity found here. No fewer than 355 species were recorded in one day of counting. Compare this to a typical southern Ontario count of 60 species at most.

Arriving at Puerto Viejo, where the cruise began, the first thing I noticed was how much warmer it was here as compared to the cooler temperatures of San Joaquin, which is in the Central Valley at a Although the main purpose of the trip was to attend a language school to improve my Spanish, I also made a point of observing as much of the flora and fauna as possible



Richard Garrigues, special to The Examiner

A crimson-fronted parakeet (above) and a blue-grey tanager (below).

much higher elevation. In fact, the Central Valley's temperate climate is one reason why more than 10,000 Canadians are now living in Costa Rica, most of them retirees.

As we slowly made our way downstream through somewhat open rainforest, a contingent of southern rough-winged swallows flew alongside the boat. All the while our guide scanned the shoreline for crocodiles. Although the crocs failed to make an appearance, a huge green iguana peering down from a branch directly above us was a nice consolation prize. This is a large, arboreal species of lizard that feeds mostly on plant material. We also saw at least six groups of howler monkeys feeding in the treetops. Several individuals treated us to their loud, barking "whoop" sound which can be heard over great distances.

A two-toed sloth also attracted a lot of attention. It took some special searching to see since it was well hidden among the foliage. Sloths spend most of their life high in trees, where they eat mostly leaves, fruit, nuts, berries and bark. Food can take up to a month to digest because of their slow metabolism. Most surprisingly, however, is that they urinate and defecate no more than once a week and actually descend to the base of the tree to do so. Why they make such an arduous trip down to the forest floor to eliminate wastes rather than release them from high in the canopy as monkeys do remains a mystery.

The Rio Sarapiqui also produced an interesting coterie of birds. Green kingfishers, a smaller but more brightly marked bird than our belted kingfisher, were common as were Montezuma oropendulas. Closely related to orioles, oropendolas nest in large colonies where they make three-foot-long hanging nests that are visible



from a considerable distance. Fasciated tiger-herons also peered down upon us from several of the huge branches that extended over the river, while black-bellied whistling ducks fed nonchalantly along the shoreline. Other species of interest included buff-rumped warblers and Cherrie's tanagers.

At one point, the driver stopped the boat in a small bay, jumped out without saying a word, and soon returned with a tiny frog, measuring less than an inch in length. It was a strawberry or "blue jeans" poison-dart frog. One name refers to its bright red body and the other to its blue legs. Although poison dart frogs excrete toxins through their skin, most species are not lethal to their predators. They simply taste foul enough that they are released immediately. The poisons are acquired from prey items the frogs eat such as ants and mites. As for their bright red and blue coloration, some biologists believe it serves as a warning to would-be predators to avoid these frogs because of their bitter, toxic secretions. One unpleasant encounter

with a blue-jean frog is apparently enough to keep a predator away from them for life.

With darkness quickly falling, we headed back to the dock. Our final sighting of note for the day was a roost of at least two dozen long-nosed bats sleeping on a tree trunk. The body of these creatures was no larger than a toonie. Costa Rica has more than 100 different bat species, and many plant species are totally dependant upon them as their only pollinators.

Next week, I will write about my trip to the towering Poas volcano and to Monteverde, where I encountered the legendary threewattled bellbird.

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