

Climate, plants and animals we find when traveling through tropical regions

By *Humberto Jiménez Saa*

<http://www.hjimenez.org>

At least four characteristics are normally attached to the idea of the Tropics as it is known by most of people in temperate zones: hot temperature, heavy rainfall, tall intermingled forests, abundant large and/or poisonous animals. To some extent this is right because those elements are present in some tropical regions. But not in all of tropical regions, and certainly nor in the majority of them. We will share some information on the tropics with our readers referred mainly to the Neotropics, which is a technical word used to name the tropical region in the American continent. In this sense that term distinguishes the American tropics from the tropics of Africa, Asia and Oceania.

Hot temperature

The tropics are lands with hot temperatures but not the highest temperatures. In fact, it is in the subtropical regions where highest temperatures occur, specially during summer. Temperatures of 37 degrees Celsius (About 100 degrees Fahr.) may occur at sea level in the neotropics lasting about 2-3 hours a day, specially from around 11:30 a.m. to around 2:00 p.m. Later on, temperature normally decreases and it is rare to experience more than 28 degrees Celsius (about 84 degrees Fahr.) late in the afternoon or at night. Also, in the tropics there are places covered permanently with snow. Those are what in Spanish are called "las nieves perpetuas" (the perpetual snows), which are large regions, common in high mountains in Peru and Bolivia, and also present in smaller areas in Ecuador, Colombia, and Venezuela. The tropical perpetual snows occur normally above 5000 meters altitude. In middle lands above sea level temperature is really pleasant the year around, day and night. Visitors may experience temperatures that are as pleasant as a well calibrated air-conditioned room, having the great advantage of being outdoors. This is true, for instance in San José (Costa Rica), Medellín (Colombia), Mérida (Venezuela); it is also true in Bogotá (Colombia) and in Quito (Ecuador), even at night it is convenient to use a medium heavy coat when being in the last two cities.

The technical definition of the tropics is closely tight to the length of the day, which in fact does not change; there are close to 12 hours of sun light the year around (for instance, in Costa Rica higher possible daily averages are: 11.42 hours in December and 12.57 hours in June, as a possible maximum). Constant mean temperature the year around is another characteristic that helps us to define the tropics. Some examples for Costa Rica: in Puntarenas, a small city near the sea shore line, the average temperature is about 26 degrees Celsius (about 80 degrees Fahr.); and this does not change too much along the year. If we go to San Jose, at about 3800 feet (1.100 meters) a.s.l., the average temperature is about 22 degrees Celsius (about 72 degrees Fahr.). Around Chirripó, the highest peak of Costa Rica, at 12,000 feet, the average temperature is about 10 degrees Celsius (about 50 degrees Fahr.). But visitors should be careful: temperature could change dramatically in the same

day in the mountains as in Chirripo, where the temperature can change from minus 5 degrees Celsius (about 25 degrees Fahr.) at 4:00 or 5:00 o'clock in the early morning, to about 16 degrees Celsius (About 62 degrees Fahr.) at 1:00 or 2:00 o'clock in the afternoon. Visitors should take a coat, if they want to spend the night in the mountains.

Heavy rain fall and tall intermingle forests

The most popular and exciting tropical life zones are the humid forests in the lowlands. These communities, when mature, are composed by moderately tall trees (up to 65 meters the most), with several layers, of which the more dense is the canopy. Lower layer at ground level are open, easy to walk through. It is only during the first stages of the natural succession that a forest community may be really intermingle.

However, such humid forests in the lowlands are not the unique, nor the most common life zones. The tropics are lands where rain fall varies more than it does in temperate zones.

Rain falls occurring in the tropics gives rise to so different vegetation types as: deserts, thorn woodlands, dry forests, moist forests, wet forests, rain forests, to mention only some of the life zones in the tropical lowlands. The dry forests are short and open communities. In tropical mountains there are -besides dry and rain forests- montane steppes, tundras, and "páramos" where normally there are no trees because of the low temperature.

Because mean temperatures do not change, we may easily understand that in the tropics there are not the kind of seasons people know in temperate zones. However, the amount of rainfall and its distribution along the year produces tremendous impact on vegetation, in such a way that people in the tropics consider of having other kind of "seasons": the dry season and the rainy one. They use words in Spanish that often confuse people: summer ("verano", in Spanish) is the dry season and winter ("invierno", in Spanish) is the rainy season. I think that this terminology started early in the Colonial period when Spaniards and Portuguesees compare what they found in America with the rainy winter season and their not-rainy summer season, as they occur in the Mediterranean climate.

Abundant large and/or poisonous animals

The Neotropics do not show large animals as it is common in Africa and Asia. So, visitors should prepare themselves to admire hummingbirds moving fast as tiny helicopters; quetzals and trogons staying several minutes in a perch; insects resembling dry leaves; turtles arriving by the thousands in quite beaches, orchids that developed strange strategies to favor pollination. They also could find themselves acting carefully in front of a tree that hosts stinging ants, and then moving fast to wear their raincoat because a sudden heavy rainfall; it is also quite possible that they should have to take that raincoat off after 5 minutes because rain stopped as suddenly as it started.

Apart from ants, abundant in some places but easy to avoid, people rarely will have problems with snakes and other poisonous animals. I worked permanently for more than 18 years in humid lowlands forests of the Neotropics in several Central and South American countries. My encounters with snakes that were a few meter from my body do not overpass

a dozen, the majority of them being not poisonous animals. I remember only two times I was in potential danger of being attacked by one snake.

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San José, Costa Rica