

## Introduction to tropical ecosystems –

Costa Rica, May 2017

### General Information, Warnings, and Risks

The following is intended to provide some information about travel in Costa Rica, based on our experience in that country. It is not intended to be exhaustive. We strongly recommend that you consult the Department of Foreign Affairs and International Trade web page for further information about international travel and associated risks, precautions, etc.

<http://www.voyage.gc.ca/index-eng.asp>. You may find other useful information at the U.S. Department of State web site <http://www.state.gov/travel/>, or at your university's website.

**1) General.** The organizers are undertaking this field trip as a non-profit educational activity. Travel, meals, and accommodation will be provided by local firms. We do this on a budget that is quite tight. The goal is to break even.

**2) Passport:** You will need a valid passport to travel to Costa Rica that should be valid for at least six months after the planned end of travel. If you don't have one, apply now. Birth certificates are not sufficient. No visa is required for Canadians. People traveling on other passports should consult with the Costa Rican consulate about visa requirements. Make a photocopy of the identification page of your passport, and keep it somewhere separate from the passport, just in case you lose the passport. Keep your passport in waterproof plastic in a money belt that you wear ALWAYS. Do not leave your passport in the lodges, except in a safe (which are rarely available).

**3) Money:** Your course fee includes airfare, room and board within Costa Rica, and entry fees into the parks and activities we visit. It does not include snacks, alcoholic beverages, souvenirs, and potentially a small number of optional activities (e.g., a herpetarium in Santa Elena, if time permits). You should bring some money and a bank card as a means of accessing more, in case of emergency.

The local currency is the colon. There are ATMs in the airport and in most towns; however, we will be in the field most of the time, far from ATMs. The lodges where we will stay along the way may be willing to change small amounts of US currency into colones. Shops that cater to tourists often accept US dollars. Other stores (e.g., markets, grocery stores or road-side cafés) do not. Canadian dollars are very unlikely to be accepted anywhere other than a bank, and that is a hassle. Credit cards are generally accepted in souvenir shops, but not always.

We recommend that you get some colones in advance, or that you bring some US cash in a money belt (along with your passport) kept under your clothing and with you at all times.

**4) Health Coverage.** YOU MUST ARRANGE YOUR OWN EMERGENCY HEALTH INSURANCE. Your provincial health card will not be accepted in Costa Rica. You (or your parents, if you are still a dependent) may already have a private plan that covers foreign travel. You **MUST** have a plan that will cover: a) emergency medical treatment in Costa Rica, b) emergency evacuation, c) emergency return transportation to Canada, d) repatriation of your remains, should any of that become necessary. The course fees **do not** include health insurance.

**5) Health risks.** It is impossible to provide an exhaustive list of all possible risks. Here, we present some of the more important risks.

We **strongly** recommend that you consult a travel physician regarding precautions (e.g., immunizations). Note that travel physicians are not covered by OHIP. Ask your physician or travel health clinic about preventative measures for tropical diseases that occur in Costa Rica.

**Malaria** is endemic in Central America. However, the World Malaria Report 2015, published by the World Health Organization (<http://www.who.int/malaria/publications/world-malaria-report-2015/report/en/>) shows no active foci of malaria infection in Costa Rica. If your physician asks, we will criss-cross the northern half of the country, at both low and high elevations.

Several potentially nasty viral infections occur in Costa Rica. According to the WHO, **Zika** virus occurs in nearly every country in the Americas except Canada (<https://travel.gc.ca/travelling/health-safety/travel-health-notice/152>). **Chikungunya** virus also occurs in Costa Rica, but to a lesser extent than in the rest of the American tropics, according to the Pan-American Health Organization (<http://www.arcgis.com/apps/MapTools/index.html?appid=ce2372254ce743b79d332b43724cd9e5>). **Dengue** also occurs in Costa Rica. These infections are transmitted by mosquitos, and there will be mosquitos in the areas where we work. Risk can be reduced by using DEET insect repellent, and by wearing long-sleeves and pants (which is a good idea for several reasons). The places where we will stay all have screens, so bed nets are not necessary. Biting bugs in Costa Rica are much less abundant than in Canada in the spring. But the tropical mosquitos are small, fast and sneaky. You can't defend yourself by swatting them.

Many travelers in the tropics develop **diarrhea**, sometimes severe. Discuss with your doctor how to deal with diarrhea, and whether it would be worthwhile to bring antibiotics in the event that over-the-counter remedies are ineffective. In general, the tap water in hotels and restaurants that cater to tourists is potable, but it is not a good idea to drink the water elsewhere. Drink bottled beverages instead, and/or bring a water bottle and fill it at the hotel. It is prudent, in developing countries, to avoid uncooked food in general, including fruits and vegetables, unless they can be peeled. Our experience is that gastroenteritis/diarrhea is not usually a serious

problem in Costa Rica. But it occasionally has been, so it is prudent to bring anti-diarrhea medication: e.g. Peptobismol for moderate diarrhea, Imodium for worse, an antibiotic for really severe diarrhea, and rehydration salts.

**Snakes** -- There are many species of poisonous snakes in Costa Rica and we will visit areas where they occur. **Snake bites can potentially be fatal.** Although they are always a possibility, snake bites are not frequent. Researchers at the Organization for Tropical Studies research station at La Selva, Costa Rica reported that 36,000 person-days of field research took place before the first venomous snake bite occurred. That bite occurred when someone in sandals stepped on a snake on a path in the residential compound. Medical care in Costa Rica is reasonably good. We will discuss ways to minimize the risk of snake bite in the field, and every participant will be provided with a pair of snake gaiters. Gaiters protect against bites from snakes on the ground, but they do not protect against snakes higher up (e.g., on trees), nor do they protect you if you are not wearing them (e.g. in the evening, on paths at the lodges).

**Insects** -- Bee, wasp, and ant stings are potential hazards; discuss insect bite allergies with your physician. The aggressive Africanized (killer) bee is also found in Costa Rica. If disturbed, the bees can potentially attack *en masse* (although we have never seen them). A few students have been stung by bees or wasps on this course over the years. Costa Rica also has other poisonous arthropods (e.g. scorpions and spiders). If you have life-threatening allergies to insect bites, come prepared and let the course organizers know. Tropical forests have an impressive diversity of insects (although not impressive quantities, compared to Canada).

**Swimming** – There will be pools at some of the lodges where we will stay. We will also go to a beautiful beach on the Pacific. The beaches in Costa Rica are dangerous! Under-toe and strong currents can pull swimmers away. There are no life-guards. **Tourists drown every year in Costa Rica.** If you decide to go in the water, you assume all risk for your safety. Be very safety-conscious. ALWAYS have a buddy with you in the water. Do not drink alcohol and go into the water.

**6) General risks.** Costa Rica is a long-standing, politically stable democracy. It is probably one of the safest countries in the tropics in which one can travel, and it is a country where foreign tourists are welcomed. Costa Ricans are mostly wonderful people, and they rarely hassle tourists. However, as the evening news reports attest, travel abroad involves generic risks that are beyond our control: transportation accidents, acts of political terrorism, etc. Unrest can arise quickly.

Personal violence is uncommon in Costa Rica, except perhaps in some areas that we will avoid. It is unwise to wander around any foreign city without first finding out which areas are unsafe. It is also unwise to wander around alone.

Petty theft can certainly occur. Valuables (including expensive cameras, electronics), money, and passports should not be left unattended in hotel rooms. Your passport, cash, debit

card, etc. should be kept on your person in a concealed money belt at all times. If you leave valuables in the hotel room, hide them, or better yet, lock them in your luggage, or in the room safe (if one is provided).

We will travel around the country in a comfortable, air-conditioned minibus with an experienced professional driver. That said, the roads in Costa Rica can be rough, narrow, and winding compared to Canadian roads. Automobile accidents are probably a greater risk in Costa Rica than in Canada. Also, if you are susceptible to motion sickness, come prepared.

Fire codes in many parts of the world are much less strict than in Canada, and hotel fires may be a risk. We cannot guarantee that hotels have good emergency evacuation plans. It is prudent, whenever you stay in a hotel, to figure out how to evacuate in case of fire.

We will visit one or more volcanos, and we will be near others. Eruptions have occurred regularly in Costa Rica. Turrialba Volcano has been active recently. The government closes access to areas with volcanic activity, but there is always a small risk of getting caught in volcanic activity.

**7) Drugs, alcohol.** Although Costa Rica is a democracy, the Canadian charter of right and freedoms does not apply in C.R., and we do not want to become entangled in another country's legal system. When you participate in this trip, you must agree not to bring, to acquire, or to use any substance that is illegal under either Canadian or Costa Rican law (including *Cannabis*). Alcohol may not be legally consumed by anyone under the age of 19. Some of the lodges where we stay have a bar. To date, we have not forbidden the consumption of moderate amounts of alcohol after course activities have finished in the evening. That said, this is not a holiday. All participants must maintain a level of behaviour appropriate to the workplace. The professors reserve the right to declare the course to be alcohol-free, at our sole discretion. We will do this *for all students* at the first sign of excess *by any student*.

Note that students are solely responsible for their own behaviour both during and after instructional hours. It is not the responsibility of the professors to monitor student behaviour.

**8) Clothing, climate and comfort.** It will be very warm and humid in lowland sites (day time temperatures of 30° to 35° at lowland sites). Even though it is hot, whenever you are in the field, you should always wear light-weight, loose pants to reduce insect bites, scratches from spiny plants, and exposure to the sun. In the field, boots (NOT RUNNING SHOES) **must** be worn at all times. Boots help protect from snake bites if you inadvertently step on a snake. It will be wet in some places (e.g., rain forest); water-resistant boots are best. When we are not in the field (e.g., evenings), running shoes may be OK if you pay close attention to where you step. In the evening, at lodges, you may wear shorts and sandals. Bring a bathing suit and towel. A **hat** to avoid sunstroke is essential, as is sunscreen.

At high elevation (e.g. Monteverde, on volcanos), it is almost always cool (12°-20°C) and rainy, so a light summer jacket is necessary. It is likely to be very rainy and wet in some of the sites; a raincoat or poncho is essential. Think also about protection for cameras or optical equipment (e.g. waterproof containers and silica gel to remove condensation).

In the old days, tropical travelers recommended cotton clothing rather than synthetics, since cotton breathes. However, when cotton gets wet, it takes a long time to dry. Clothing and footwear that dry quickly are definitely an asset, since you are guaranteed to get wet. Leave jeans at home: they are too heavy, they take forever to dry, and mosquitoes are attracted to indigo.

In any Costa Rican town, especially San José, women should dress modestly. Shorts, tank tops, bare midriffs, etc. in urban areas will almost certainly provoke attention (sometimes hands-on) from local men that you may find offensive.

8) Accommodations – We will stay in tourist lodges and research stations. Some are quite luxurious, while others are quite basic. In all cases, there are flush toilets and showers, but not necessarily hot water. There are always beds with clean sheets and clean towels. There are always screens (no bed nets necessary). We have not yet encountered bedbugs or “kissing bugs” (the vector of Chagas disease), but we do see cockroaches, scorpions, and ants in the lodges. These can get into your footwear overnight. Always check for visitors in your footwear before putting them on. Note that, when travelling in Central America, the level of service found in North American hotels may not always be met, and field conditions are not always the most comfortable.

Rooms will be shared by three to four people. You are likely to have to share a double bed with someone of the same sex, at least some of the time.

If you have special dietary needs, please let us know in advance. Most lodges will provide vegetarian meals, but they may not be exciting. Rice and bean come with nearly every meal in Costa Rica (seriously!).

**9) Baggage.** You can use any luggage, but it is not always possible to wheel luggage. You may have to carry it over rough ground, up stairs, etc. Check with the airline regarding weight restrictions. A daypack is essential. You should always carry with you: sunscreen, insect repellent, a hat, a water bottle or two (the 500 mL bottles you buy in a convenience store are fine), and rain protection.

**10) Special Medical Conditions:** The trip involves travel to remote areas. We are trained in first aid, but the organizers and tour operator are not equipped to deal with life-threatening medical conditions. Rapid access to medical care may be difficult in some field sites.

**11) Physical ability:** Expect moderately strenuous physical activity: hikes through hilly terrain which may take several hours. The temperature will sometimes be over 30°C. The professor, who is over 60 and has had a hip replacement, can do this. He will not hesitate to shame anyone who complains about this. If you cannot handle demanding hikes, then this course is not for you.

**12) Fear of heights, spiders, insects:** Several hikes involve bridges suspended through the canopies of the forest. These are very high. There are lots of spiders. If you really afraid of heights, spiders or insects, this course is not for you.

**13) Religious observance:** We have made no provision on this trip for religious observance.

The risks described above, and probably others that we have not mentioned, are beyond our control. By deciding to travel in tropical ecosystems, you must accept those risks. Of course, we do our utmost to minimize risks, and the probability of serious incident is small. The most serious problems our students have had in the past are serious sunburn, diarrhea, stinging nettle (an irritating plant: remember – long pants, closed shoes). In one case, a student got badly cut on rocks in the ocean while trying to body surf. One student stepped on a snake in the Viper family (almost certainly poisonous), which then struck her boot. It did not penetrate the boot, but if she had been wearing running shoes, she would have been in trouble.

BY PARTICIPATING IN THIS COURSE, YOU AGREE THAT YOU ACCEPT THESE RISKS OF TRAVEL AND OF PARICIPATION IN FIELD ACTIVITIES AS YOUR PERSONAL AND SOLE RESPONSIBILITY.