



The
Leatherback
Trust

Playa Cabuyal

Sea Turtle Biology Training Camp



Photo: Karla Hernández

Dr. Bibi Santidrián Tomillo

Science Director & Principal Investigator for Cabuyal Monitoring Project

bibi@leatherback.org

Join us at Playa Cabuyal!

The Leatherback Trust warmly welcomes you to join our Sea Turtle Biology Training Camp at Playa Cabuyal, Costa Rica!

The Leatherback Trust mobilizes research data from our monitoring efforts in Playa Cabuyal to reduce threats to leatherbacks and other imperiled sea turtles. By participating in our conservation research activities, you are helping to save East Pacific green and leatherback sea turtles.

Playa Cabuyal is an important secondary nesting beach for East Pacific leatherbacks, a critically endangered population that has decreased more than 98% over the past three decades. The Leatherback Trust's Science Director, Dr. Bibi Santidrián Tomillo, together with Dr. Gabriela Blanco, established the monitoring program at Playa Cabuyal in 2011.

Three species of sea turtles regularly nest at Playa Cabuyal: leatherback, olive ridley and East Pacific green (also known as black) turtles. We have also seen hawksbills nesting here; although this is a rare occurrence. Playa Cabuyal is also home to jaguars, monkeys and crocodiles, as well as many beautiful species of tropical birds.

This booklet provides information on our research activities and other key information on the Playa Cabuyal Sea Turtle Training Camp.

It is essential that you read this information in detail. Important information on trip logistics, including our rendezvous site, what to bring, vaccinations, and required fitness level are included. Further information on the research project and your role in research activities are also explained.

To apply for Sea Turtle Biology Training Camp. Please send an email to bibi@leatherback.org with your CV/Resume, the dates you would like to attend (15 days minimum) and an indication that you have read and understood this booklet.

We look forward to seeing you at Playa Cabuyal!

Sincerely,
The Leatherback Trust

Cabuyal Team

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Field Season

The Field Season at Playa Cabuyal is from September 15 to March 31.

Contact Information

Cabuyal Cell*: (+506) 8393-1901

Goldring-Gund Marine Biology Station: (+506) 2653-0635

The Leatherback Trust in San José: (+506) 2253-6250

*There is no phone-signal at Cabuyal, so the Cabuyal Cell can only be accessed when it is outside the camp. The phone will be accessible during the day of arrival during the rendezvous time.



Project History

The research project at Cabuyal has been running since January 2011. Every year, we collect data on the population biology and nesting ecology of the sea turtles. When we started the research project, our main aim was to assess the importance of the Gulf of Papagayo as nesting grounds for sea turtles and to analyze the feasibility and need for establishing a long-term research and conservation project in the area. After five years, we have a clear picture of the sea turtle species that nest in this area, their abundance, nesting ecology and have identified the main threats to their survival. By monitoring the beaches in the long-term we have reduced egg poaching, predation and increased nest protection. Our intention is to continue answering important questions on the biology of sea turtles and protecting nests on the beach.

Sea Turtle Species

Four sea turtle species nest at Cabuyal. The most abundant species is the East Pacific green turtle, commonly known as black turtle (*Chelonia mydas*). The beach is also frequented by solitary olive ridley turtles (*Lepidochelys olivacea*) and leatherback turtles (*Dermochelys coriacea*). On very rare occasions, hawksbill turtles (*Eretmochelys imbricata*) also nest here.

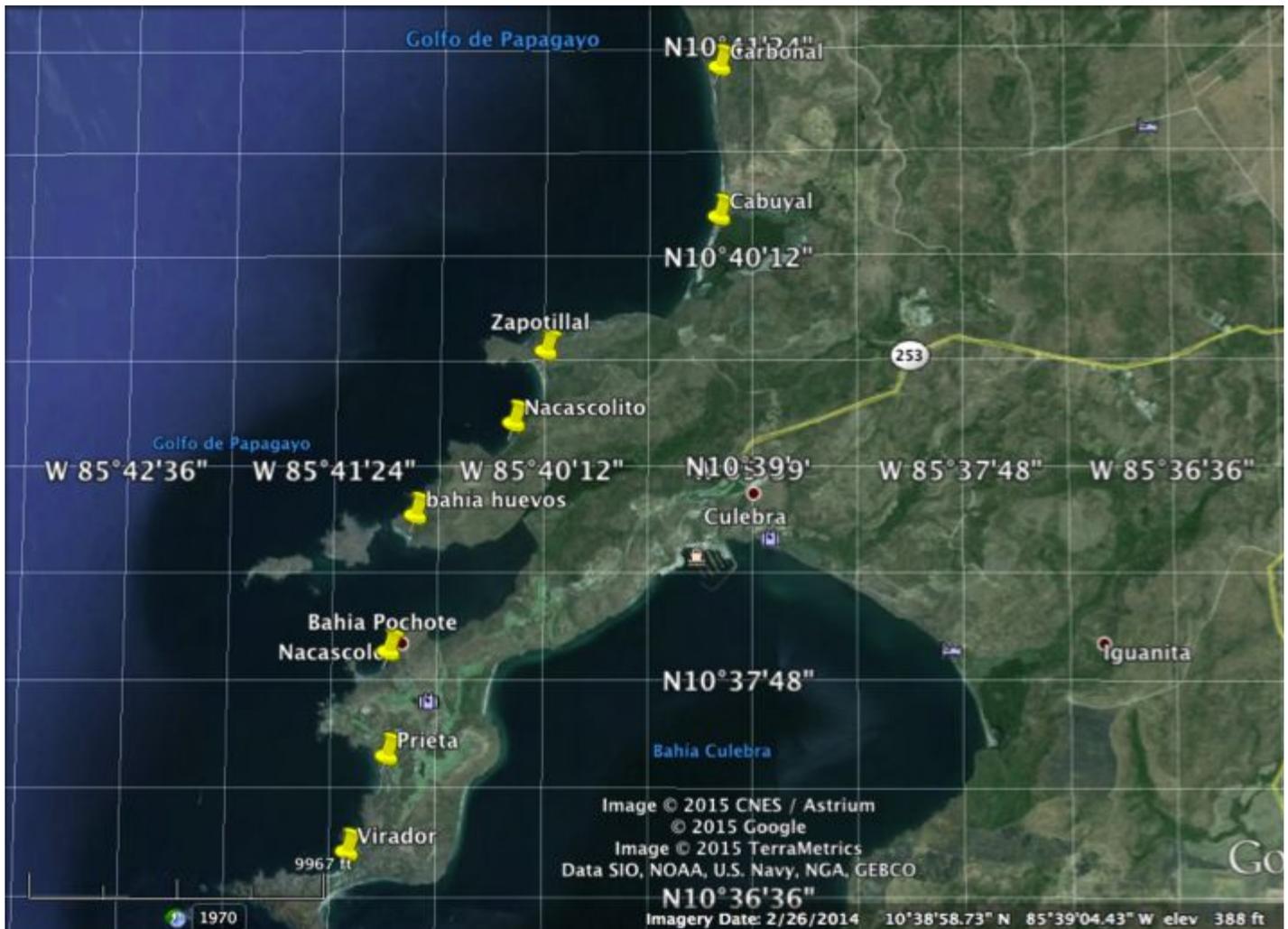
Research Activities

The core of the nesting season extends from September to March with some level of nesting occurring throughout the year. Main data collection include marking and identifying nesting turtles, measuring turtles, counting eggs, marking the nest, taking temperatures, conducting nest excavations during the hatching season and releasing hatchlings at night.



Playa Cabuyal

Coastal wilderness and breathtaking beauty



Papagayo Peninsula Beach Monitoring

During your time at Playa Cabuyal, you may be asked to participate in monitoring activities at other nesting beaches in the Papagayo Peninsula region. These are depicted in the above map with yellow pins (from North to South): Carbonal, Cabuyal, Zapotillal, Nacascolito, Bahía Huevos, Nacascolo, Prieta and Virador. At times, other beaches may be assessed with drones.

Playa Cabuyal is the site with the most consistent monitoring effort. Although it is 45 minutes walking distance from Playa Cabuyal, Playa Zapotillal is difficult to access, has no water and is not always monitored. Zapotillal is 0.5km long and is situated to the south of Cabuyal, separated by two “cerros”. We will make 1-2 day trips to monitor Zapotillal occasionally, most likely during the dry season.



Cabuyal: Jewel of the Gulf of Papagayo

The Gulf of Papagayo is a rich marine environment. Whales, dolphins and manta ray are often spotted from shore. Playa Cabuyal is 1.4km long, located within the Guanacaste Conservation Area and to the south of Santa Rosa National Park. Mangroves surround most of the beach and an estuary opens out at the south end of Playa Cabuyal, serving as habitat for crocodiles and countless species of birds. Sea Turtle Biology Training Camp participants may also explore the neighboring beach to the north, Playa Carbonal, which is exposed only at low tide.



Morning Patrol

We patrol the beach at 5am each morning to count tracks and verify nesting activities during the previous night. Occasionally, we see a “morning turtle” laying her eggs at sunrise. This is the best time for photography!

Duration: 2 hours

Beach Rules:

- *Priority is given to the turtles’ well-being, above everything else.*
- *Bright lights disturb nesting turtles and hatchlings. Except for approved red lights, no lights are allowed on the beach at night.*
- *It is prohibited to take videos or photos of turtles at night.*
- *Phones and music players cannot be used on the beach during work duties.*



Night Patrol

We patrol the beach for 4-8 hours each night, depending upon the number of turtles. The number of turtles per night cannot be predicted, but during the peak season there may be between 5-20 turtles per night. On some nights, there will not be any turtles.

Each night patrol is composed of 2-3 persons (one biologist and 1-2 Sea Turtle Biology Training Camp participants). Depending upon the time of year, we will do 1-2 patrol shifts per night. We mark and measure the turtles, count eggs, mark nests and occasionally relocate clutches of eggs at risk of inundation (as determined by the biologist on duty).

Duration: 4-8 hours

Other Research Activities

We may ask participants to assist with other research activities. This may include deployment of camera traps to assess local wildlife, use of aerial drones to assess nesting activities, and deployment of transmitters and/or tags to track in-water movements of sea turtles.



Nest Excavations

We excavate nests once hatchlings have emerged to determine hatching success. This is done by examining remaining the eggs and eggshells. It is also not uncommon to recover a trapped hatchling turtle within the nest and save them for release later that evening.

Duration: 1.5- 2 hours, in the afternoon.

Nest Temperatures

We take nest temperatures in the afternoon every other day to learn more about how environmental conditions affect nesting success. The sex of sea turtle hatchlings is determined by the temperature of the nest.

Duration: 1.5-2 hours

Other Beach Duties

These activities may include: nest triangulation, maintenance of beach markers, and protecting nests from predators (like raccoons).



Free Time

All participants will have one free day per week with no scheduled activities. Additionally, there is free time during the day for resting and relaxing between activities.

Leaving Camp

If a participant decides to leave Cabuyal Camp during his/her free time, he/she must inform the Camp Coordinator and take safety precautions.

All participants are responsible for their own safety and well-being outside of Cabuyal Camp. The Leatherback Trust is not responsible for what happens to Sea Turtle Biology Training Camp participants outside working days or working hours or for what happens to any participant if he/she does not follow Cabuyal Camp rules or safety guidelines.

The rainy season brings magical waterfalls to the dry forest.

Physical Requirements

Sea Turtle Biology Training Camp participants must be able to walk and carry equipment on the beach. Walking in soft sand beach can be strenuous, especially at night in the dark. All participants must be able to walk for several hours each night, carry a backpack and see reasonably well in the dark.

Participants will also be expected to change their sleeping patterns to work at night when most sea turtle nesting activity occurs. Sleep schedules may be irregular and change frequently, with napping encouraged during daylight hours.

Age Requirement

All Sea Turtle Biology Training Camp participants must be 18 years of age or older on the day of arrival. There are no exceptions to this rule.

Minimum Stay

Sea Turtle Biology Training Camp participants must commit to a minimum of 15 days at Cabuyal Camp (1-2 month commitments are given priority).

Room & Board

The participation fee is \$8/day for Costa Ricans and \$16/day for international biologists to cover camp food and accommodations. Additional costs such as airfare, visas, bus transportation to/from Guardia and personal supplies or snacks are not covered.

Valid Passport

Double check your passport's expiration to ensure that it will be valid for more than 6 months after your return date and make sure your passport enough pages for new stamps. You will be responsible for securing any visas required for entry to Costa Rica.

Travel Insurance

All Sea Turtle Biology Training Camp participants must provide a valid certificate of travel insurance, including health coverage and emergency evacuation services, prior to arrival at Playa Cabuyal.

Camp Rules and Shared Duties

Cabuyal Camp has a strict no alcohol and no drug policy. Any participant who fails to adhere to camp rules or presents a safety hazard will be asked to leave. All participants are expected to share in camp duties, including cooking and cleaning.



Simple Accommodations

The Cabuyal Camp is located 2 kilometers from Playa Cabuyal. The camp has 3 rooms with bunk beds and a small room where research equipment is kept. There are 2 bathrooms for a maximum capacity of 10 persons.

Cabuyal camp has no hot water. A small solar panel generates enough energy to charge cell phones and other small electronics, but space is limited. There is no cellular reception in Cabuyal Camp.

Remote Location

Access to Cabuyal can be difficult, especially during the rainy season. Sea Turtle Biology Training camp participants do not leave camp often. Our team uses the vehicle to buy food once a week or do pick-ups in Guardia.

All participants should be prepared to live simply in this remote location where communication with the external world is limited.

Please bring your own set of twin bed sheets (top sheet, bottom sheet and pillowcase) and towel with you to Cabuyal Camp.

The living conditions at Camp Cabuyal are simple and peaceful.



Meals

Participants prepare communal meals in an outside kitchen. Each day, two people are assigned to prepare meals for everyone in camp. You don't need to know how to cook, but everyone should be prepared to assist with meal preparation and clean-up after meals.

Lunches and dinners may be pasta or a traditional Costa Rican casado, a dish based on rice and beans with chicken, vegetables or salad. Breakfast is usually pancakes and/or cereal, with eggs on occasion. Cookies are often shared on night patrols.

Tap water is potable in Playa Cabuyal and water is consumed at every meal and throughout the day.

Dietary Restrictions

It can be difficult to accommodate strict vegetarians and vegans at Playa Cabuyal. It is possible, at times, to cook without meat but many of our meals include animal proteins and we are often unable to cook separate meals. Anyone with dietary restrictions should make these known before planning to attend Sea Turtle Biology Training Camp.

Preparing breakfast at Cabuyal Camp in the outdoor kitchen.

Although this document includes the most recent information available, the work that you will do at the time you join the project may vary slightly depending on the project's needs. Additionally, there are other factors to consider such as tropical storms, equipment failure, etc. Field research often requires improvisation and some degree of flexibility.

Physical preparation.

Exercising frequently is important to prepare for fieldwork. Strong stamina and physical fitness will help participants adapt faster to the work and will improve the productivity of the team.

Emotional preparation.

When you arrive on the project, you will be in a new place with new people and new tasks. If you struggle with the new setting, do not hesitate to communicate your worries to the field crew.

Isolation.

Cabuyal can be accessed by car and there is a road that gets to the site, so the camp is not completely isolated. Once in Cabuyal, however, internet and phone access are limited, and often, not possible. Although, most people enjoy these conditions, sometimes people struggle with being away from contact for several days. We normally leave the camp by car once a week to go grocery shopping and check email at a local internet cafe, but not everybody goes every time.

A bus stops at a bus stop located just 45-minutes walking distance from Cabuyal Camp. Those who are not able to continue participating in field duties have the option of taking this bus if they need to leave the camp. The project's vehicle is always at Cabuyal but it is only used for work or in case of an emergency.

Being part of a team.

The research team is a small community (maximum 10 people). Many people are not used to the living and working conditions of field research. It is important to have the ability to get along with others. During the project you will be expected to participate in activities, such as cooking and cleaning, that require group effort. All participants will receive an orientation upon arrival to be sure that everyone is informed about the project and how to have a safe, fun and respectful experience.



ARRIVALS

Rendezvous: Guardia, 12:30-1pm

All Sea Turtle Biology Training Camp participants are requested to arrive at the rendezvous site (the main bus stop in the town of Guardia, Costa Rica) by 12:30pm on their confirmed pick-up date. We advise travelers to arrive in Costa Rica at least one day prior to the confirmed pick-up date to avoid missing the bus due to flight delays. When you arrive to Guardia, a member of our team driving a gray pick-up truck will be there to greet you. Cell phone service is unreliable, so please do not rely on it.

DEPARTURES

Sea Turtle Biology Training Camp participants will be dropped off in El Triunfo on the day of their scheduled departure to catch the 6am bus to Liberia. This bus, with a final destination of downtown Liberia,, stops along the way at the Liberia airport between 7-7:30am. Please allow sufficient time for transportation when scheduling departing flights.

Playa Cabuyal is remote and cell phone service is unreliable. Be sure to make the rendezvous to Guardia on time.

FROM LIBERIA

Flights to Daniel Oduber International Airport (LIR) - Liberia

We recommend flying into Liberia airport, which receives direct flights from Houston, Dallas, Miami, Charlotte, Atlanta, Newark, New York, Los Angeles, Toronto, Panama City, San Salvador and London.

Outside the Liberia airport is a bus stop (look for the sign that says *Parada de Autobuses*), with buses to the [Municipal Bus Station](#) in downtown Liberia. Tickets can be purchased directly from the driver and cost 1000 colones (around \$2). Taxis to downtown Liberia cost about \$15 from the airport.

We recommend staying one night in Liberia in case of flight delays. [Hospedaje Dodero](#) offers inexpensive accommodations (about 200 m north of the Municipal Bus Station).

Bus from Liberia to Guardia

Buses to Guardia depart from both the [Municipal Bus Station](#) and the [Pulmitan Bus Station](#) (200 m south of the Municipal Bus Station). If you are departing from the Municipal Bus Station in downtown Liberia, look for buses destined for Nicoya, Santa Cruz, Tamarindo, or Flamingo. At the Pulmitan Bus Station, look for buses [to El Coco](#). Tickets to Guardia can be purchased in Liberia's Pulmitan station for 1000 colones (around \$2) or directly from the driver on municipal buses. Regardless of which bus you choose, the rendezvous is always at Guardia's main bus stop between 12:30-1:00pm. The town of Guardia is rather small, so it is a good idea to bring extra snacks and water.

FROM SAN JOSÉ

Flights to Juan Santamaría International Airport (SJO) - San José

As Costa Rica's main airport, San José International receives flights from many countries across the Americas, as well as London, Paris, Frankfurt, Munich, Amsterdam and Madrid. Unless you are planning to do some sightseeing in San José, we advise against flying into San José (SJO). Travel time from San José to Guardia is roughly 5 hours.

Outside the San José airport is a bus stop with buses to downtown San José. Tickets can be purchased on board and cost 600 colones (around \$1). Buses from the airport stop in downtown San José at the [Parada Alajuela](#) near the Parque de La Merced. Do not take the bus at night and be mindful of your belongings, as robberies are not uncommon.

We recommend staying at least one night in case of any travel delays. [Margarita's Guest House](#) (10 minutes from the airport by taxi for around \$4-6) is a good option in the La Giralda neighborhood in Alajuela, close to the SJO airport and 20km from downtown San José. Travelers staying at Margarita's can catch the bus to Guardia from the [bus stop at La Radial Alajuela-Aeropuerto \(marked as Central de Autobuses del Norte on Google Maps\)](#) (3km from Margarita's), instead of going to downtown San José, since the same bus from San José to Playas del Coco passes through Alajuela and stops at La Radial between 8:20 and 8:30am.

If you prefer to stay in downtown San José, [Hotel Sura](#) is located 350m to the east of Pulmitan Bus Station. Travelers staying outside the San José city center are advised to budget plenty of extra time for traffic to reach Pulmitan Bus Station in time for their departure.

Bus from San José to Guardia

The [Pulmitan Bus Station](#) is located in downtown San José (about 1km from the *Parada Alajuela*). To reach Guardia, take the [bus from San José bound for Playas del Coco](#) leaving at 8am, stopping at the rendezvous site (Guardia's main bus stop) between 12:30-1pm. Bus tickets from San José to Guardia cost 5000 colones (around \$10) and should be purchased inside the Pulmitan Bus Station in San José.

Clothing

Comfortable pair of sneakers or boots for patrols
Sandals or flip-flops for camp
2-3 pairs of moisture-wicking socks
1-2 pairs of shorts
1-2 pairs of long lightweight pants (not jeans)
3-4 lightweight t-shirts or tank tops
1-2 long-sleeve lightweight shirts (as sun protection)
1 sweatshirt or light jacket
1 raincoat or poncho (rainy season is July-December)
1-2 bathing suits/swim trunks
Hat with wide brim and bandana
Underwear and sleepwear

Toiletries

30+ SPF sunblock
Comb/brush
Eco-friendly shampoo/conditioner
Bath soap
Deodorant
Eco-friendly toiletries
Toothbrush/toothpaste
Insect repellent (for mosquitoes)
After-bite stick
Blister kit
Personal medications (as needed)

Other Items

Bath towel
Set of twin bed sheets
1-2 refillable waterbottles
Headlamp with red filter, extra batteries
Camera (charger, batteries)
Journal, pen and pencil
Sunglasses (and extra eyeglasses, if you wear them)
Dry bag (optional)
Bag for wet clothes
Money (up to \$200 cash in \$20 bills)
Day pack or backpack
Binoculars (optional)
Snacks like granola or cereal bars for energy (optional)

Travel Tips

- Bring mineral-based SPF 30+ sunblock (non-nano titanium dioxide or zinc oxide) and reapply often.
- Choose eco-friendly and biodegradable toiletries to protect Costa Rican ecosystems.
- Pack lightweight long pants for long walks. Don't bring denim.
- Make sure your hat has a wide brim and bring 1-2 long-sleeved shirts as sun protection.
- A windbreaker or sweatshirt is nice for chilly evenings.
- Bandanas are great for keeping the sun off your neck.
- Pack clothes you can get dirty.
- If you generally have allergic reactions to mosquito or bug bites, you may want to bring antihistamines.
- A personal first aid kit with pepto bismol, ibuprofen, band-aids, and neosporin is helpful but not required.
- You must stay hydrated! Bring at least two 1-liter bottles that fasten securely and will not leak in your backpack.
- Use Ziploc bags to protect your electronics from water and sand.
- Sunglasses are essential for daytime beach work like nest excavations.
- There is no need to exchange U.S. bills to colónes. U.S. ATM cards work in most Costa Rican machines.
- Binoculars are not required but are very useful for spotting birds and crocodiles as well as stargazing.
- Bring packable high-energy snacks, like energy bars. Upon departure, you can leave behind any extra snacks for our field biologists, if you wish.

Foot Injury

Closed-toe shoes are required to protect feet from sharp sticks and stones. Wear comfortable sneakers or hiking boot for patrolling and use socks to reduce the risk of blisters.

Dangerous Animals and Plants

Venomous snakes and scorpions are present in the area. Do not approach them.

The Manzanillo or Beach Apple tree (*Hippomane mancinella*) is poisonous, the fruit is deadly and contact with the sap can cause a rash. Do not eat any wild fruits and be mindful when walking through vegetation or choosing a resting location at the beach.

Mosquitoes and other insects are common in Costa Rica. Protect yourself from mosquitoes with long-sleeved shirts, lightweight long pants and socks to cover your ankles. If you are allergic to any insect bite, please bring an Epi-Pen or emergency kit and be sure to tell our team about your allergy and the location of your Epi-Pen and/or emergency kit.

Befriending domestic animals is not advised in Costa Rica. Dogs are not likely to be vaccinated and their presence endangers sea turtle hatchlings.

Sun

Dehydration, heat exhaustion, sunburn and other heat-related illnesses can occur. Protect yourself by drinking enough water, wearing high-SPF sunscreen and sun-protective clothing.

Personal Security

Avoid traveling on Costa Rican roads at night. Be careful when traveling on Costa Rican buses. Keep your wallet, passport, camera and any other valuables with you at all times. Unfortunately, bag robberies are becoming more frequent on Costa Rican buses. Do not wear or bring expensive jewelry.

Swimming

Dangerous rip tides and high waves may occur off Playa Cabuyal. Swimming is at your own risk. Sharks, crocodiles or stingrays may also present danger. Always alert a member of our team when, where and with whom you plan to go swimming. Never swim alone.

Vaccinations

Travelers from countries where yellow fever is present must have a certificate of vaccination to enter Costa Rica.

No vaccinations are required for travelers from the U.S. and Europe, but please check with your travel doctor to ensure you are up to date on the usual recommended travel vaccinations: DPT (diphtheria, pertussis, tetanus), MMR (measles, mumps, rubella), polio, and hepatitis A.

Emergencies in the Field

A 4-wheel-drive vehicle is available for emergency evacuations from Playa Cabuyal.

Medical Facilities

There is a paramedic service at the marina in Papagayo, 20 minutes from Playa Cabuyal, a private clinic and private hospital 30 minutes from Playa Cabuyal, and a public hospital in Liberia 60 minutes from Playa Cabuyal.

Police Station

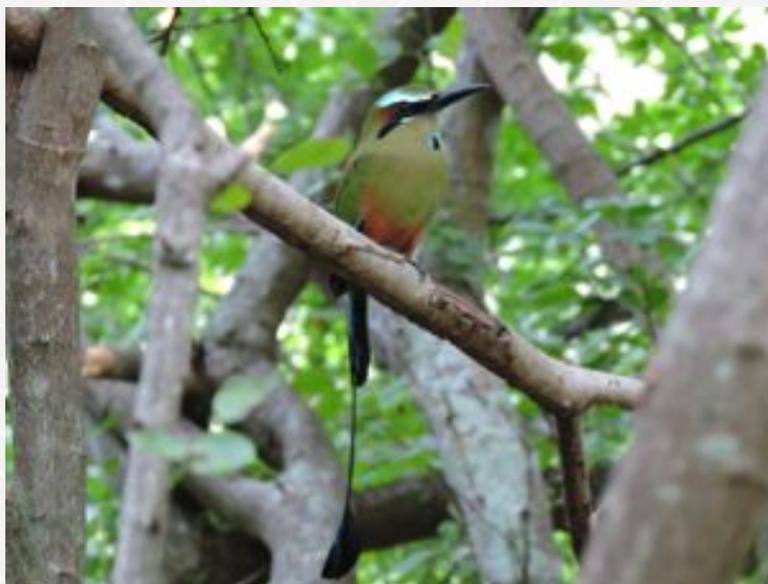
The police station in Guardia is a 30-minute drive from Playa Cabuyal.

Ministry of Environment and Energy (MINA E)

There are two MINAE stations located within 25 minutes from Playa Cabuyal: the Horizontes Biological Station (ACG) and the Iguanita Wildlife Refuge (ACT).

Municipal Guard and Coast Guard

A municipal guard is present on the beach during the day. The coast guard is often seen in the Gulf of Papagayo.



Climate: Tropical with humidity between 20-80%, temperatures ranging from 60°F/15°C to 95°F/35°C and 1-5 inches/25-125mm weekly rainfall.

Language: Spanish (official), English (widely known)

Population: nearly 5 million people (1/3 live in San José metropolitan area)

Time Zone: GMT/UTC -6. No daylight saving time.

Cultural Considerations: Wearing very short shorts, low cuts or tight shirts may draw unwanted attention that will detract from your experience. Western-style bathing suits are fine to wear on the beach.

Electricity: Costa Rica uses the same electrical system as the U.S. 120 V: flat two-pin plugs and some three-prong plugs. There is no electricity at Playa Cabuyal, only solar panel under limited use.

Phone Codes: To call any Costa Rican number from outside Costa Rica, you must dial the country code followed by the 8-digit number: 00506 from landlines or +506 from cell phones (e.g. 00506 2653 0635 or +506 2653-0635). To call another country from Costa Rica, you must add their international code (e.g. +1 for U.S. or +44 for the U.K.) before the number.

Roaming is accepted in Costa Rica, contact your phone company for further information. You may also purchase a local SIM card on arrival. There is no cellular service at Playa Cabuyal.

Local Currency: Colón in singular and colones in plural (₡) is the Costa Rican currency. US Dollars are usually accepted in denominations of \$20 or less. Small shops do not accept debit or credit cards. We recommend bringing at least \$200 USD in cash.

Learn More: www.visitcostarica.com



The Leatherback Trust

The Leatherback Trust (TLT) works tirelessly to protect the critically endangered East Pacific leatherback and other imperiled sea turtle populations worldwide. We achieve our conservation goals through research, education, habitat protection and advocacy. TLT develops and implements innovative sea turtle conservation strategies, informed by sound science and coordinated through collaborative international partnerships.

Learn more at www.leatherback.org



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