



earthwatch expeditions
by Nat Hab

Explore with Purpose



Tracking Turtles in Costa Rica

Help Endangered Leatherback Sea Turtles Rebound from a Precipitous Decline



Table of Contents:

Trip Overview	3
Trip Itinerary	5
Trip Accommodations	8
Meet the Scientists	9
Science & Impact	11
Discovery in the Field	14
Dates & Pricing Information	16
Know Before You Go	18



Explore with Purpose



Trip Details:

Days

7 days / Jan,
Feb, Nov,
Dec

Tracking Turtles in Costa Rica

Help Endangered Leatherback Sea Turtles Rebound from a Precipitous Decline

On Costa Rica's Pacific coast, leatherback sea turtles come ashore under the cover of darkness to nest on protected beaches at Las Baulas National Marine Park. This stretch of coastline is among the most important nesting areas in the Eastern Pacific for the species, and the focus of one of Earthwatch Expeditions' longest-running research programs. Here, scientists are working to understand a critically endangered population that has existed in the same form since the Cretaceous period, about 100 million years ago, and whose numbers have dropped by more than 90% since 1980. Take part in this crucial work to uncover what's driving these losses and learn what it will take to help leatherback turtles rebound.



Explore with Purpose

Research at a Glance

Your Role in Research



The Research Focus

Study how endangered turtles nest, forage and move between beaches and offshore feeding grounds, examining how climate, habitat change and human pressures affect survival.



What You'll Do

Patrol nesting beaches after dark to find turtles, monitor nests and hatchlings and record field data. Head offshore with scientists to measure, tag and study juvenile turtles in a protected Pacific bay.



Why It Matters

Eastern Pacific leatherbacks have declined by more than 90% since 1980. Data from this research helps protect and conserve beaches and coastal waters that are vital to their survival.

Trip Highlights

Head offshore with scientists to observe juvenile turtles in coastal waters, assisting with measuring, tagging and recording data in their ocean habitat

Track nests on the beach and witness hatchlings emerge, contributing to research that determines whether turtles survive their most vulnerable stage

Hike dry-forest ridgelines among iguanas, parrots, motmots and other vibrant birds, then sail at sunset with dolphins, rays and whales in season



Explore with Purpose



Itinerary At A Glance

Day 1

Liberia, Costa Rica / Playa Bahia Salinas

Day 2

Santa Rosa National Park—Sea Turtle Research & Coastal Exploration

Day 3

Santa Rosa / Monkey Farm Visit / Playa Grande—Sunset Sail

Days 4 - 6

Playa Grande—Sea Turtle Conservation & Coastal Fieldwork

Day 7

Playa Grande / Liberia—Depart

Tracking Turtles in Costa Rica Itinerary

Help Endangered Leatherback Sea Turtles Rebound from a Precipitous Decline

Day 1: Liberia, Costa Rica / Playa Bahia Salinas

Arrive at Liberia International Airport where you are met by your Field Guide and transferred to the far northwest corner of Costa Rica's Guanacaste Peninsula near Playa Bahia Salinas. This coastline supports one of the most important nesting populations of leatherback sea turtles in the Eastern Pacific. The drive crosses Guanacaste's dry tropical forest, where low-branching trees and scrub open into pasture before giving way to denser vegetation near the humid coast.



Settle in at your lodge within walking distance of the beach, then gather this evening for a welcome dinner. Your Field Guide introduces the journey ahead, explaining how scientists monitor nesting turtles, why this beach remains critical nesting habitat for leatherbacks, and how decades of data have shaped conservation efforts across the region. Leatherback nesting in the Eastern Pacific has declined by more than 90% since 1980, making each nest here especially significant.



Explore with Purpose

Day 2: Santa Rosa National Park—Sea Turtle Research & Coastal Exploration

Board a boat this morning and travel into the protected waters of Bahia Matapalito in Santa Rosa National Park, where dry forest meets open sea, and shallow, warm waters support abundant marine life. This habitat is critical for juvenile sea turtles. Working with researchers, help locate turtles and bring them alongside the boat for study. Measure and document each one, check for tags, and record identifying details that track turtle growth and movement over time. As you swim or snorkel, look for turtles passing below you in the water, as they navigate through their feeding grounds. You may also watch rays glide along the sea floor and fish gather in shifting schools, while the coastline stays in view. A traditional Costa Rican lunch is served aboard the boat or on the beach. Exact plans may shift with weather and sea conditions, wildlife behavior and research priorities, so we are prepared to stay responsive to what unfolds during the day.

Day 3: Santa Rosa / Monkey Farm Visit / Playa Grande—Sunset Sail

After breakfast, depart for Playa Grande, stopping en route to visit the Monkey Farm, a small family-run rescue and education center in regenerating dry forest. Founded in 2003, it rehabilitates injured and displaced wildlife—including howler monkeys, capuchins and spider monkeys—while restoring habitat and supporting local environmental education. The organization provides lifelong care for non-releasable animals and works with nearby communities to promote coexistence. On a guided walk, observe monkeys in the canopy, along with parrots, coatimundis and other species, and learn about regional conservation challenges and efforts.

Continue to Playa Grande to spend the afternoon along the coast where you may choose a guided hike, sunset sail or both. In Las Catalinas, trails wind through dry forest to reach exposed ridgelines with broad views of headlands, beaches and the Pacific Ocean. Look for iguanas in the brush, parrots and motmots crossing overhead, and white-tailed deer deeper in the forest. On an evening sail, watch for dolphins and rays, and, in season, whales offshore. As the sunset gleams and fades, the coast is washed in gold and amber, eventually settling into dusk.



Explore with Purpose

Days 4 - 6: Playa Grande—Sea Turtle Conservation & Coastal Fieldwork

Playa Grande is one of the last major nesting sites for Eastern Pacific leatherback turtles, a population that has declined by more than 90% since 1980. Protected within Las Baulas National Marine Park, it supports one of the longest-running sea turtle research programs in the region. We work alongside scientists from The Leatherback Trust, which leads this long-term study in partnership with Earthwatch Expeditions. Their team has monitored turtles here for decades, building the dataset that guides conservation of leatherbacks across the Eastern Pacific.

Each night, patrols run in two shifts—from sunset to midnight and midnight to sunrise. In small groups, walk the shoreline, watching the surf for movement as turtles come ashore to nest. When one emerges, we follow at a respectful distance. Under red light, assist with measuring, checking tags and recording each nesting event. Stand just behind the turtle as she lays her eggs, counting and documenting them. Some nights are active, with multiple turtles on the beach; others require patience, and we may see few to no turtles.

Late afternoons include a science talk or time in the hatchery, monitoring nests and early hatchling development—occasions that connect our fieldwork to broader research and conservation impact. Mornings and early afternoons are open and at your leisure. Rest up, or explore more of our environs—kayak the Tamarindo Estuary, ride along the coast or visit nearby beaches and towns. By sundown, it's time to return to the shoreline. On our final evening, gather for a farewell dinner with your Lead Scientist, research team, Field Guide and fellow travelers to celebrate the week's work.

Day 7: Playa Grande / Liberia—Depart

Spend a final morning on Playa Grande, returning to the beach with a more practiced eye. Tracks, nests and subtle shifts in the sand reveal turtle activity that unfolded overnight. Depending on timing, you may join one last survey or help check active nests. Later, it's time to transfer to Liberia's international airport for onward flights, departing with a deeper understanding of sea turtle conservation work and the role of long-term research in protecting these endangered species across the Eastern Pacific.



Explore with Purpose



Accommodation Details:

For detailed descriptions, visit nathab.com/earthwatch-expeditions/costa-rica-sea-turtle-conservation-trip/accommodations

Tracking Turtles in Costa Rica Accommodations

Help Endangered Leatherback Sea Turtles Rebound from a Precipitous Decline



Meet the Scientists

Ph.D. Chelsea Clyde-Brockway

Executive Director, The Leatherback Trust



Dr. Chelsea Clyde-Brockway is a marine scientist focused on a central challenge integral to conservation: how endangered sea turtles survive in rapidly changing ocean conditions. She is Executive Director of The Leatherback Trust, a leading sea turtle conservation organization, and a Postdoctoral Research Associate at Purdue University. She earned her Ph.D. in Wildlife Science from Purdue University, following earlier degrees in biology and marine biology.

Her research follows sea turtles across life stages, from nesting beaches to offshore habitats, to understand how environmental change affects their physiology, behavior and survival. By connecting these stages, she pinpoints when and where turtles face the greatest risk and uses that insight to create more effective conservation strategies. Her research has directly contributed to the establishment of the Papagayo Marine Responsible Fishing Area, reducing threats to sea turtles and other marine species while supporting sustainable fishing practices and local livelihoods along the coast.

By using research tools that include stable isotope analysis, hormone testing and satellite tracking, her work maps where turtles have been feeding and how they are using energy and responding to stress. This research reveals how changing ocean conditions—such as shifting prey availability and rising temperatures—affect turtle health and survival, often before declines are visible on nesting beaches. By building long-term datasets across these systems, Dr. Clyde-Brockway helps pinpoint the drivers of decline and provides the evidence needed to guide policy and protect endangered sea turtle populations over time.

Education

Ph.D. in Wildlife Science, Purdue University
M.S. in Biology, Purdue Fort Wayne
B.S. in Marine Biology, Sonoma State University



Explore with Purpose

Supporting Scientists



Ph.D. Frank Paladino

Professor of Biology,
Purdue University
*Marine Research, Costa
Rica*



Explore with Purpose

Science & Impact

As part of this project, you are contributing to one of the longest-running sea turtle research efforts in the Eastern Pacific, where each observation helps scientists understand how this endangered species survives and can recover. Accrued over decades, this data influences how nesting beaches are protected and how conservation strategies are carried out across the region.

Research Focus

On the sands of Playa Grande, leatherback turtles emerge from the surf after dark to nest on one of the most important beaches in the Eastern Tropical Pacific. This project documents what happens here and in nearby coastal waters where these turtles feed, grow to maturity and eventually return to reproduce. The scientific study follows turtles at different stages, from nesting females on shore to younger turtles feeding in places like Bahia Matapalito. Leatherbacks are the primary focus, alongside Eastern Pacific green sea turtles, olive ridleys and hawksbills that also use these same beaches and coastal waters.

On land, researchers track nesting activity, egg development and hatch success. Offshore, they study how turtles use feeding areas and how younger turtles grow. Since 1993, this project has built one of the longest continuous datasets on sea turtles in the region, helping scientists understand population trends and how changing climate and habitat conditions affect survival.

Conservation Impact

Leatherback turtles in the Eastern Pacific have declined by more than 90% since 1980, making this one of the most urgent marine conservation challenges today. Since 1993, this ongoing research project has helped drive vital conservation efforts.

- **More than 30 years of continuous research**, building one of the longest-running sea turtle datasets in the world
- **Over 100 peer-reviewed studies**, informing conservation science, policy and management decisions
- **Thousands of nests protected and hatchlings released each season**, including significant numbers of endangered leatherback hatchlings
- **Tens of thousands of hatchlings recorded annually** across green turtles and olive ridleys at key nesting sites
- **Protection of critical habitat**, including the creation and ongoing management of Las Baulas National Marine Park



Explore with Purpose

- **Policy impact at local, national and international levels**, shaping coastal lighting, fisheries practices and habitat protection, and elevating the Eastern Pacific leatherback population to "Critically Endangered" on the IUCN Red List
- **Daily patrol presence that deters poaching and disturbance**, safeguarding nesting beaches in real time
- **Community partnerships and education programs** that support long-term conservation and a sustainable local economy

This work continues year after year, with each protected nest and dataset contributing to this enduring effort to protect sea turtles across the Eastern Pacific.

Your Role in the Research

Walk the beach after dark, scanning the surf for movement. When a leatherback emerges, gather behind her and measure, check tags and record each nesting event under red light. As she lays eggs, count them as they drop into the nest, and record the data used to track her over time. When nests are at risk from flooding or predators, relocate eggs to protected hatchery sites. At first light, return to the beach to read tracks in the sand, confirm nesting activity, measure sand temperatures and monitor conditions that affect hatchling survival. Head offshore to Bahia Matapalito, where turtles feed in shallow coastal waters. Slip into the water to swim or snorkel alongside the boat, helping guide turtles in before measuring, weighing, tagging and releasing them. Each observation contributes to long-term research tracking sea turtle populations across the Eastern Tropical Pacific.

Life in the Field

Days are shaped by tides and turtle activity. Most activity happens at night, when the beach is quiet except for the sound of surf and sand shifting underfoot as turtles come ashore. Hours pass in the dark as we walk, watch and wait. Mornings start early. In daylight, the same stretch of beach is marked by tracks, nests and signs of the night's activity. After several hours of observation and tracking on foot, the pace shifts. Midday brings time to rest, stepping away from the beach or heading out on the water. Afternoons may include nest checks or preparation for the next patrol. By evening, the cycle begins again. Some nights bring multiple turtle sightings, while others pass in long stretches of quiet.

Field Conditions



Explore with Purpose

Field sites span open nesting beaches and nearby coastal waters, accessed on foot and by boat. On land, cover miles of shoreline, walking through soft sand during patrols that can last up to 6 hours. Days are warm and humid, with little shade along the beach. Time in the field alternates between walking, crouching at nests and periods of still observation. Shifting weather is a constant, and ocean conditions can also vary during boat-based research. After dark, temperatures cool, visibility declines and the beach becomes quieter, with activity focused in a narrow band between the surf's edge and the sand. Our research plans are constantly adjusted to adapt to changing conditions, including tides and turtle activity. Flexibility is part of the experience.



Explore with Purpose

Discovery in the Field

1

Contribute To Hands-On Conservation Science

Conduct night patrols, early morning surveys and offshore investigation while measuring turtles, recording data, relocating at-risk nests and monitoring hatch success as part of a long-term research effort.

2

Work Directly With the Research Team in the Field

Join lead scientist Chelsea Clyde-Brockway, Ph.D., and her local research team for hands-on fieldwork, contributing to one of the longest-running sea turtle studies in the world.

3

Read Costa Rica's Coast Like a Researcher

Spend time in marine and coastal habitats, learning how ocean conditions, beach conditions and human pressures shape the sea turtles' future.

4

Patrol the Beach as Turtles Come Ashore at Night

Walk Playa Grande, a globally significant nesting site, at night as turtles come ashore to nest, documenting activity and taking part in one of the most critical moments in their lifecycle.

5

Enter the Turtles' Ocean Habitat at Bahia Matapalito

Head offshore into protected coastal waters to locate, measure and tag juvenile turtles to document how they grow, move and survive in their ocean habitat.

6

Kayak, Hike & Visit Local Villages

Glide through the Tamarindo Estuary, hike forest and ridgeline trails, and visit nearby beaches and towns during free mornings and afternoons while at Playa Grande.

7

Learn How Research Shapes Protection

Discover how decades of scientific work here helped establish Las Baulas National Marine Park and continues to guide sea turtle conservation across the Eastern Pacific.

8

Explore with an Expert Field Guide

Your Field Guide ensures that each day runs smoothly, coordinating logistics and providing personalized support throughout the trip.



Explore with Purpose

9

Travel With an Intentionally Small Group

Because we deliberately limit our group size to a small cohort of participant researchers, each guest gets quality time in the field, enjoys meaningful interactions with the scientific research team, and plays an active role in daily research activities.

10

Explore With Purpose

Take part in fieldwork that supports ongoing conservation research, directly contributing to the protection of sea turtles and the habitats they depend on.



Explore with Purpose



Dates & Pricing
Summary:

Group Size:
Limited to 12
Travelers

Tracking Turtles in Costa Rica Dates, Pricing & Info

Help Endangered Leatherback Sea Turtles Rebound from a Precipitous Decline

Pricing

See <https://nathab.com/earthwatch-expeditions/costa-rica-sea-turtle-conservation-trip/dates-fees> for the latest pricing details.

Included

Trip price includes: All accommodations, services of Earthwatch Expeditions' professional Field Guides, local guides and lodge staff, all meals from dinner on Day 1 through breakfast on final day, private transfers throughout the itinerary, some gratuities, airport transfers on Day 1 and final day, all activities and entrance fees, all taxes, permits and service fees.

Not Included

Travel to and from the start and end point of your trip, alcoholic beverages, some gratuities, passport and visa fees (if any), optional activities, items of a personal nature (phone calls, laundry, etc.), airline baggage fees, airport and departure taxes (if any), required medical evacuation insurance, optional travel protection insurance.



Explore with Purpose

Mandatory Insurance

Since the areas we travel to are remote and wild (that's why we go there!), we require that all guests have, at minimum, medical evacuation insurance for this program. This is for the safety of all guests. We require that your chosen independent insurance plan includes at least \$250,000 in medical evacuation coverage.

To protect your investment and to provide peace of mind while you travel, we also strongly recommend purchasing comprehensive travel insurance. Plans may cover everything from medical treatment to trip cancellations and delays and lost luggage. Please contact our office if you would like more information about the medical evacuation and comprehensive travel insurance policies we offer by calling 800-548-7555.

Getting There & Getting Home

This trip begins and ends in Liberia, Costa Rica. **You must arrive in Liberia by 3 pm on Day 1** in order to make it to the hotel in time for a 6 pm welcome dinner. For guests who come in early, recommended hotels will be included in your pre-departure materials.

You may depart Liberia any time after 1:30 pm on the final day.

Our Earthwatch Expeditions Travel Desk can best assist with your travel reservations, as our staff is familiar with the specific requirements of this program and can help arrange the most efficient itinerary. Please call us at 800-548-7555. While we offer the best available rates to us on airfare and additional nights accommodations, you may occasionally find special web rates or lower fares online.



Explore with Purpose

Know Before You Go

Why Is Costa Rica One of the Best Places in the World to See Sea Turtles?

Costa Rica protects several of the most important sea turtle nesting beaches in the Eastern Pacific, providing critical habitat where females return each season to lay their eggs. Weeks later, hatchlings emerge from the sand and move toward the ocean, guided by the reflection of moonlight on the water.

Researchers study nesting activity here to understand how climate change, beach conditions and ocean health affect turtle survival. Because nesting occurs at night, conservation patrols offer the rare opportunity to observe wild sea turtles while supporting research that helps protect them.

Quick Facts: Tracking Turtles in Costa Rica

- **Location:** Guanacaste Province, Pacific coast of Costa Rica
- **Research partner:** The Leatherback Trust
- **Primary species:** Leatherback, olive ridley, hawksbill and green sea turtles
- **Key activity:** Nighttime nesting patrols and boat-based turtle research
- **Conservation focus:** Nest monitoring, juvenile turtle research and environmental data collection

What Wildlife Will I See on a Sea Turtle Conservation Project in Costa Rica?

While sea turtles are the primary focus, Costa Rica's Pacific coast supports a diverse mix of coastal, marine and forest wildlife that you are likely to encounter throughout your stay. These nesting beaches and surrounding forests form a dynamic ecosystem shaped by tides, currents and seasonal weather patterns. Many species move between ocean, shoreline and forest habitats, offering varied wildlife sightings during both day and night.

Most Likely



Explore with Purpose

- **Sea turtles** (nesting females or hatchlings, depending on season)
- **Dolphins** (especially during boat excursions)
- **Howler monkeys** (often heard before they are seen)
- **White-faced capuchin monkeys** (frequently seen moving through the trees)
- **Iguanas** (commonly seen basking in the sun near forest edges and open areas)
- **Pelicans and frigatebirds** flying offshore
- **Herons and egrets** along wetlands and estuaries
- **Shorebirds** such as sandpipers and plovers feeding along the tide line
- **Ghost crabs and hermit crabs**, especially during night patrols
- **Tropical fish** observed during boat or snorkeling activities

Medium Likelihood

- **Spider monkeys** moving through the canopy
- **Coatis** foraging along forest edges
- **Raccoons** on beaches at night
- **Rays** (including mobula or devil rays) offshore
- **Parrots and parakeets** in the coastal forest
- **Motmots** perched in shaded vegetation
- **Tree frogs** (active after dark)
- **Basilisk lizards** near water or forest edges

Rare

- **Small sharks** (reef species offshore)
- **Boa constrictors and other snakes** (occasionally seen in forested areas)
- **Crocodiles** (present in the region but not typically seen in main guest areas)
- **Hawksbill turtles** (less common than green or olive ridley turtles)
- **Daytime nesting turtles** (occasionally observed but not expected)



Explore with Purpose

What Is the Climate Like While Tracking Turtles in Costa Rica?

Costa Rica's Pacific coast has a warm tropical climate year-round, with high temperatures, humidity and strong sun exposure. Fieldwork takes place on exposed beaches and nearshore environments, where participants experience direct sun during the day and warm, humid conditions during nighttime patrols, with little temperature variation between day and night.

Rainfall varies seasonally, with drier conditions typically from December through April and more frequent, short bursts of rain from May through November. Because research takes place outdoors for extended periods—often at night or in full sun—participants should be prepared for heat, humidity, sun exposure and occasional rain in any season.

Condition	What to Expect
Daytime Temperatures	80–95°F
Nighttime Temperatures	60–70°F
Humidity	High
Winds	Moderate
Rain	Short, frequent showers May–November; drier December–April

Frequently Asked Questions

Do I need research experience?

No prior research experience is required. Scientists and project staff provide training in research methods and data collection.

What type of research will I assist with?

Participants assist with sea turtle research across both coastal and marine habitats. Activities may include nighttime beach patrols, monitoring nesting turtles and nests, and participating in boat-based surveys to study juvenile turtles in nearshore feeding areas.



Explore with Purpose

What is the conservation impact of this research?

This expedition supports sea turtle conservation through ongoing research with The Leatherback Trust. Data collected during patrols helps scientists monitor nesting activity, measure hatchling success and guide conservation efforts.

How physically demanding is the expedition?

Participants should be comfortable walking up to 6–8 miles during nighttime beach patrols on soft sand and spending extended periods outdoors in warm, humid conditions.

Fieldwork may include walking in low-light conditions, kneeling or crouching to assist with nest monitoring and boarding small boats for offshore research. Participants should also be prepared for shifting sleep schedules due to nighttime research activities.

Can weather affect research activities?

Yes. Weather conditions such as heavy rain, high tides or strong surf may affect patrols or fieldwork.

Researchers adjust schedules as needed to maintain safety and continue monitoring turtle populations.

What happens in case of an emergency?

Participant safety is a priority on all expeditions. Field staff follow established safety procedures and maintain communication during research activities.

If medical care is required, staff coordinate transportation to the nearest appropriate facility.

Do I need travel insurance?

Travel insurance is strongly recommended and should include coverage for trip cancellation, interruption, medical expenses and emergency evacuation. **For this program, travelers are required to purchase medical evacuation (medevac) coverage.** Earthwatch provides travel medical insurance for participants.

What immunizations & travel vaccinations do I need?

Participants should consult a healthcare provider before travel, as routine vaccinations are recommended for Costa Rica and additional vaccines such as hepatitis A or typhoid may be advised.

Mosquito-borne illnesses such as dengue, Zika and chikungunya are present, so participants should take precautions and review current health guidance before departure.

What should I bring?

Participants receive a detailed packing list before departure outlining recommended clothing, field gear and personal supplies.

Essential items include lightweight clothing, footwear suitable for walking on sand and a headlamp with a red-light setting for nighttime patrols.



Explore with Purpose

What Should I Pack for a Sea Turtle Conservation Project in Costa Rica?

Participants should pack for warm coastal conditions and nighttime fieldwork. Recommended items include:

- Lightweight shirts and pants
- Long-sleeved shirts and long pants for nighttime patrols
- Comfortable footwear such as sneakers or sturdy sandals for walking on sand
- Headlamp with a red-light setting (to minimize disturbance to nesting turtles)
- Wide-brimmed hat
- Sunglasses
- Sunscreen
- Insect repellent
- Refillable water bottle
- Small daypack

Bring several pairs of socks for nighttime patrols, as they help protect feet from sand abrasion and insect bites. A lightweight rain jacket is recommended during the rainy season.

What Will I Experience While Tracking Turtles in Costa Rica?

Costa Rica's Pacific coast supports some of the most important sea turtle nesting beaches in the Eastern Pacific, where leatherback, olive ridley, hawksbill and green sea turtles return each year to lay their eggs. Participants assist scientists with conservation research both on protected nesting beaches and offshore in juvenile feeding areas, helping monitor turtles, protect nests and collect data that supports long-term conservation.

What Does Daily Fieldwork Look Like?

Fieldwork follows the natural rhythms of the turtles, with nighttime beach patrols focused on locating and documenting nesting activity. Daytime work may include boat-based research, coastal observation and data collection in marine habitats, depending on conditions and research priorities.

By contributing to field research alongside The Leatherback Trust, participants directly support conservation efforts along Costa Rica's Pacific coast.



Natural Habitat Adventures • PO Box 3065 • Boulder, CO USA 80307
USA & Canada: 800-548-7555 • International: 303-222-8861

© 2026 Natural Habitat Adventures