



**PROJECT REPORT
COSTA RICA VOLUNTEER TRIP
SEPTEMBER 6 - 14, 2024**



Volunteers after completing projects on hatchery nest #3.

Executive Summary

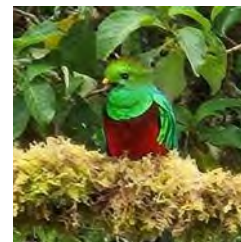
Conservation Volunteers International Program (ConservationVIP®) led a volunteer trip to Costa Rica in September 2024. The group, consisting of thirteen individuals, included two trip leaders from ConservationVIP, Jim Upchurch and Chris Braunlich. Throughout the trip the group was accompanied by Alex Arias, a local guide from Costa Rica Sun Tours, who provided insightful guidance and participated in the volunteer activities. Additionally, Sergio Miranda, the skilled and supportive driver, joined the group and lent a helping hand throughout the entire journey.

The volunteer activities focused on the protection of sea turtles nesting on the beaches of Punta Banco, located on the South Pacific coast of Costa Rica. These conservation initiatives were carried out in collaboration with Proyecto Conservación Tortugas of the Punta Banco Community Association, a local nonprofit organization established in 2004 whose vision is to become a coastal community living responsibly with its natural and social environment, through sustainable and ecological practices.

Sea turtles nesting in the Punta Banco area typically begins in late June or early July. The peak nesting season activity is in September and October. The turtle incubation period is 45 to 60 days, depending on the temperature and turtle species. This trip was planned to occur at a time when the volunteers could help with the turtle nesting and the volunteers would have the opportunity to witness the newly hatched sea turtles and to participate in their release back to the ocean.

The volunteer group dedicated an impressive total of 434 volunteer hours towards various projects and accomplished the following:

- At Punta Banco, the group contributed 369 hours improving and maintaining the turtle hatchery nests, patrolling the beaches for new turtle nests and transferring 233 newly laid eggs to the hatchery nest, releasing 246 newly hatched turtles, and other activities which supported the turtle conservancy project.
- In the cooler cloud forests of the highlands of Cerro de la Muerte, the volunteers contributed 65 hours of volunteer work on projects supporting conservation of the Resplendent Quetzal. They helped maintain trails used for viewing of the Quetzals, assisted in building new nests for the species, relocated a completed nest within a designated protected area, and planted 62 avocado trees which will eventually produce the favorite food of the Quetzal. The volunteers' efforts in creating a suitable habitat for the Quetzal were instrumental in supporting the preservation and well-being of these magnificent birds.



The country of Costa Rica has a well-deserved reputation for its effort to protect its impressive biodiversity. Through their dedication and hard work, this volunteer group made a tangible and lasting impact on the ecosystems they encountered in Costa Rica and became part of the world-wide community of people contributing to this important task. Their efforts contributed to the conservation and protection of vital habitats, leaving behind a legacy that will benefit both the local communities and the remarkable wildlife that call these areas home.

DETAILED TRIP REPORT and ACCOMPLISHMENTS

Day 1 – meet in San José.

The first day, September 6, the group met at the hotel for an introductory meeting and orientation to the volunteer projects planned for the days ahead, followed by dinner. Alex Arias, our Costa Rica Sun Tours guide, joined in and shared the itinerary and outlook on what the group could expect in the coming days.

Day 2 - Travel to Punta Banco

Early the next morning, the group boarded the bus to embark on the long drive to Punta Banco, the primary volunteer project site. Along the way, the group saw the enormous amount of land dedicated to industrial scale palm oil plantations and learned about some of the history and consequences of large-scale banana, pineapple and palm oil production in Costa Rica. They also stopped for lunch and other rest breaks to stretch their legs. The group reached Punta Banco just before dark and checked into Casa Marea Alta Lodge.



After dinner, Thomas Koblinger, the Program Manager for the turtle conservation program of the Punta Banco Community Association provided the group with an orientation to Proyecto Conservación Tortugas and outlined the volunteer project priorities for the group.

The primary risk to nesting turtles is from poaching, both by people and animals. Another risk is beach erosion. Since it is estimated that only 1 in 1,000 turtles released into the ocean will survive to maturity when they reproduce, protection of the nests and nesting beach area is critical to the long-term survival of sea turtles.

Thomas explained to the group how they have successfully integrated the local community in the conservation effort by providing financial incentives to participate in turtle conservation. Local community members now earn the equivalent of \$20-21 per nest for participating in nursery preparation, collecting eggs, covering the eggs at the nursery, and releasing eggs when they hatch. In 2015, on average the association protected 300 sea turtle nests./yr. Through increased community involvement, they have helped the community become more economically viable and they now protect 700 – 800 nests per year. Nests have approximately 100 eggs/nest, which means they protect 70,000 – 80,000 turtle eggs/year. While these numbers seem very high, only 70 – 80 of these turtles are expected to survive and return to nest in the future.

Days 3 - 6 - Sea Turtle Projects in Punta Banco

General schedule: Newly hatched turtles are released either early in the day or in the evening just before sundown, the optimal time in terms of temperature and to ensure that neither artificial light nor nocturnal predators will interfere with the turtles' natural instinct to head for the ocean when they are released. The volunteer group was told that they might be awakened for turtle release at around 5:30 am *if* a nest hatched overnight and there were turtles that needed to be released early in the morning. However, since no early morning releases were required, the project days at Punta Banco started at 8 a.m., just after breakfast.

The conservancy has three turtle hatchery nesting boxes which are different sizes and were in different stages of preparation for hosting turtle incubation. Many of the projects during the day revolved around improvement and maintenance of those nesting boxes. The volunteers generally worked till noon, took a break for lunch and rested in the early afternoon during the hottest portion of the day, then returned to the projects from 3 till dinner.

Since turtles come ashore to nest and lay eggs after dark, the group patrolled the beach area after dinner to look for turtles which were laying eggs on the beach. Wearing dark clothing and red

headlamps to avoid disturbing the nesting turtles, they were accompanied by members of the local community to ensure that they did not interfere with the locals' ability to earn money for conserving turtle nests. If they found a new nest, they helped to relocate the eggs to the hatchery nesting boxes.



Bucket Brigade

On the morning of **September 8**, the group went to the turtle conservancy staging area and divided into groups to work on different tasks. The largest group used a bucket brigade to move 102 cubic feet of sand from the beach area into hatchery nesting box #2.

The conservancy has access to an old school building next to box #1 which they want to improve so they can use it for volunteer activities and to rent out to raise money for the turtle conservancy. Two of the volunteers started working on a project



to replace corroded metal bars on a 6 x 6-foot window in the building with wooden lattice work.

Others in the group raked the field between box # 1 and 2 and piled the debris at the base of the trees which separate the beach from the field, helping to fortify the beach erosion barrier built up by earlier groups.

After lunch at Soda TiTiguana and an early afternoon rest, the group attached 109 feet of new netting around hatchery nesting box #1 to protect the 289 (i.e., 17 x 17) nesting spots from predators. The group was happy to learn that the netting had been confiscated by the Coast Guard from a boat which was illegally fishing off the coast of Costa Rica.



Attaching netting on the hatchery nesting box

After dinner, the group patrolled the beach, following the protocol of wearing red headlamps to avoid disturbing any nesting turtles. Unfortunately, they did not see any nesting sea turtles.

On the morning of **September 9**, the volunteers again divided into smaller groups for different tasks. Two volunteers continued working on the window replacement in the repurposed school building. Three volunteers picked up plastic from the beach. The beach is heavily impacted by plastics washing up from the ocean, so while the cleanup effort was important, it barely made a

dent in the problem. Some continued the chore of clearing the field and moving debris to the tree/beach border. The rest of the group went to a nearby area where they cut long pieces of bamboo and then carried the bamboo to nesting box #2 where the bamboo was attached to upright posts to form railings on the box. After the railings were installed, netting was installed over the railings to protect the box, similar to what the group project the previous day on box #1.



When the group returned to the hatchery in the afternoon, they participated in excavation of some turtle nests. Based on the typical incubation period, the turtle conservancy had expected that some of the turtle nests which were relocated from the beach to the protected nests in early July should have hatched by this point. They were unsure if the delay in turtle hatching resulted from unusual variation in ambient temperature during the incubation period, or if there was some other problem with the nests, so they decided it was prudent to excavate some nests to learn more about the status of the eggs.

When the first nest was opened, some of the eggs showed signs of fungus, an undesirable but not uncommon condition. One of the eggs broke during excavation of that nest, which led to the big surprise that the nest contained eggs from a Hawksbill turtle. Nobody had witnessed the mother turtle who had laid the eggs, so it had been assumed they were Olive Ridley eggs since most of the turtles nesting in Punta Banco are Olive Ridley turtles. Since Hawksbill eggs take longer to hatch than Olive Ridges, the nest was covered back up with sand to give the remaining eggs more time to hatch.



The first turtle hatched this season

Another nest which was exhumed had no viable eggs, so the eggs were moved to the beach and buried. The old sand in that nest was dug out and replaced with new sand. However, there was joy in a third nest which was opened up. One baby turtle, the first turtle hatched this season, was

found alive! The tiny turtle was coated with sand and hardly seemed real, but it eagerly headed for the ocean when it was released on the beach. The other eggs needed more time, so they were covered up for later.

That evening the group again patrolled the beach looking for nesting turtles, but again none were found.

On the morning of **September 10**, the volunteers began the arduous task of filling hatchery nest #3 with 134 cubic feet of sand. To fill the nesting box, some volunteers formed a bucket brigade to move sand up from the beach to a road, where it was dumped into a wheel barrow. Other volunteers pushed the wheel barrows filled with sand to the nesting box location, up a ramp and



then dumped the sand into the nesting box. Volunteers inside the box shoveled and raked the sand to spread it out. This third nesting box is located on land owned by Rancho Burica, a lovely property in Punta Banco which rents lodging to visitors. Tanya, one of the managers of the property, helped with the sand project, and then was kind enough to offer the exhausted group the opportunity to cool off after the project in the waterfall located at Rancho Burica.



During the rest period scheduled for that afternoon, Alex led an optional hike at the nearby Tiskita Reserve to see some of the local wildlife. On the hike, Alex pointed out a variety of wildlife, including the three types of monkeys indigenous to the area (squirrel monkeys, white-faced monkeys, and howler monkeys) as well as sloths, toucans and agoutis (a large rodent native to Costa Rica).

As the group was returning from the guided wildlife hike, it received word that one of the turtle nests had just opened, so the group hustled back to nesting box #1 to help with the release. The excitement was palpable as the group released 71 Olive Ridley turtles onto the beach and watched as their natural instinct to return to the ocean immediately became apparent. When the group returned to the nesting box, another nest had opened, so the group released another 103 turtles on the beach before dinner.



Newly hatched turtles



Releasing the new turtles

That evening the group again patrolled the beach looking for nesting turtles and found one! It was awe-inspiring to watch an Olive Ridley sea turtle laying a remarkable 124 eggs! It felt as if nature was rewarding all the individuals in the volunteer group for their willingness to haul sand during the heat of the morning in order to help with turtle conservancy.



Turtle nesting in the glow of the red headlamps



Collecting turtle eggs after mother turtle left

September 11th was the last full day at Punta Banco. It had not yet rained during project work that week, but rain was forecast for that morning. Expecting deteriorating weather resulted in a mix of emotions, both wanting to quickly finish up and return to cooler climate and also wanting to make sure that we were leaving the conservancy with nesting boxes fully ready for turtle nest occupancy. As it turned out, the rain held off as the group applied itself to completing the preparation of nesting box #3 in the morning. The group cut bamboo, carried it to the box, installed the bamboo railings, attached netting outside the railings, and finished leveling and raking the sand in the box – all challenging tasks which seemed a bit simpler since the group had done them before.



An added bonus was a cooler delivered which was filled with ice cold coconuts which after their tops were cut off provided a refreshing drink of coconut water which was a fitting way to end our work at the nesting boxes. You can see the smiles of pride in a job well-done and happiness to complete the job in the photo on the front page of this report.

In the afternoon, the volunteers painted their names on repurposed wooden signs to be hung on the posts of the nesting boxes as a commemoration of their contributions to turtle protection. Then they packed up before dinner to be ready for an early morning departure the next day.



A special thank you dinner was held that evening at TiTiguana. Several members of the community who attended the dinner were honored for their top contributions in collecting sea turtle eggs over

the last year, receiving red headlamps for use in their future nest hunting. After dinner, a few intrepid folks ventured onto the dance floor and tested their footwork with the marimba music provided by the local hosts.

The earlier delayed rain was beating down after dinner, but that didn't stop some dedicated volunteers from doing one final beach patrol. They were rewarded by the sight of a turtle who laid 109 eggs as they watched, and by helping with the release of 71 hatchlings they found when they took the newly laid eggs to the hatchery.

Day 7 - Travel to Cerro de la Muerte - The Highlands:

After an early morning departure and long drive from Punta Banco on **September 12th**, the group arrived at Cerro de La Muerte and checked into the picturesque Paraiso del Quetzal Lodge at about 5 p.m. While Alex's stories and the ever-changing scenery and views out the window were interesting, some of the trip participants felt that the most notable aspect of the day was Sergio's wonderfully calm and capable driving, especially in contrast to the reckless driving exhibited by some commercial trucks, motorcycles and autos on the winding mountain roads. Apparently safe and responsible driving would have required more patience than those drivers could muster.

The Lodge is located above 8,000 feet of elevation in the highlands of Costa Rica, so the volunteers welcomed the change from the heat and humidity they had experienced at Punta Banco while quickly pulling out warmer clothing. Some gathered near the fireplace in the lodge before dinner while others spent their time watching the many hummingbirds near the back deck of the lodge.

Day 8 – Projects supporting the Resplendent Quetzal

After breakfast, the group was introduced to Jorge Serano (a.k.a. Cookie), the owner of the Paraiso del Quetzal Lodge who also coordinated the various activities of the local KABEK Association which is dedicated to conservation of the Resplendent Quetzal which prefers this highlands habitat. Jorge explained that KABEK is the name for the Quetzal in the local indigenous language. The members of the Association include private landholders, the national park, a forest reserve and a private reserve, who coordinate with the Costa Rica Wildlife Foundation.

One of the major challenges to Quetzal survival that they prefer to nest in dead trees, but there is a dearth of dead trees due to farming and cutting for firewood. The Association constructs nests from harvested live trees and erects these nests in areas considered to be good Quetzal habitat. Similar to the approach at Punta Banco, the KABEK Association encourages Quetzal conservation by helping the Association participants to benefit economically as a result of their quetzal support. For example, the Association places Quetzal nests and plants Quetzal's favorite avocado trees to supply them food on land set aside by private land owners. All the Quetzal sponsors coordinate to report when they have quetzals on their land, the local guides then bring birdwatchers who want to see the quetzals to the places with the best chance of viewing Quetzals and the landowners receive payments for allowing the birdwatching.

After receiving an introduction to the KABEK Association and the planned activities for the day, the volunteer group split into three groups: One group worked with Jorge's father (also named Jorge) to build Quetzal nests. The rough outline of a nest had been carved into lengths of trees and scored in checkerboard fashion with a chain saw. The project consisted of chiseling out the scored wooden blocks to complete the nest cavities. Though the repetitive hammering of the chisels on

the hardwood blocks quickly generated sympathy for woodpeckers' heads, it was rewarding to learn that a Quetzal would require 3 weeks to build a nest, while people could build one in three hours.



Another group worked on improving a trail on a nearby reserve which is used by birdwatchers who want to see Quetzals. They carved 24 steps into the trail to facilitate hiker safety. A third group raked and cleared approximately ¾ miles of trail similarly used by birders around the lodge's reserve area.



When the projects were complete, the group took a completed Quetzal nest and 62 small avocado trees for transplanting on property set aside by a nearby private landowner to attract Quetzals. The most challenging part of this assignment was raising the Quetzal nest. Though the group ultimately was able to lift the nest, we agreed that before the next nest project we need to plan a better way to lift such a heavy and cumbersome nest.



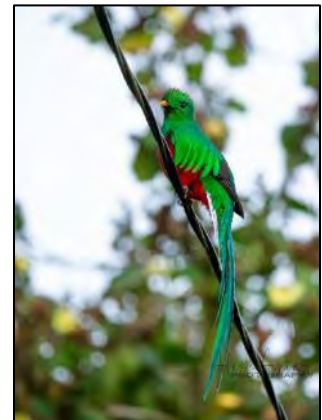
With the full group involved in transplanting the avocados trees, the task was quickly and efficiently accomplished.



The group decided it wanted to dedicate one tree to a special person. One of ConservationVIP's trip leaders who had helped to plan the trip and expected to help lead the trip had to cancel her travel plans shortly before the trip due to a family medical emergency. The group learned that the trip leader's son had passed away that week while the

group was in Costa Rica. In his memory, the strongest of the avocado seedlings was selected and planted in a place of honor, where we hope that at some time in the future some of these marvelous birds will share their beauty with the world.

After a late lunch, the group visited the spot which the local KABEK Association had reported as the best Quetzal viewing point that day. Accompanied by Alex and another local guide who specializes in Quetzals, the group was treated to some extraordinary sightings of Quetzals. This reward was especially gratifying because the timing was not typically known for the best Quetzal viewing, plus because September is a slow time of year for Quetzal viewing, it was clear that the revenue brought by the group's visit was especially appreciated by the local association.



To close out a wonderful day, the group enjoyed a delicious farewell dinner, then packed for an early morning departure for the airport in San Jose, where the trip ended.

Acknowledgements



Special thanks go out to Costa Rica Sun Tours for orchestrating the intricate logistics of this unforgettable journey. We especially appreciated the support provided by our exceptional guide, Alex Arias, who worked tirelessly to ensure we had a good experience.

Our incredible bus driver, Sergio Miranda, made sure our transportation was safe and enjoyable, all while laboring with us throughout the projects.

We appreciate the Punta Banco Community Association, especially Thomas Koblinger, for allowing us to participate in a meaningful way in their important turtle conservation work.

We thank the KABEK Association for including us in their dedication to conservation of the beautiful Resplendent Quetzal.

Finally, Conservation Volunteers International Program extends its heartfelt gratitude to all the dedicated volunteers who poured their energy, hearts and souls into ensuring the success of these projects. Through their efforts, the world is a better place.

