

Costa Rica May-June 2023 Trip Report

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Introduction

I am a naturalist who collects lifers from all animal taxa - mammals, birds, reptiles, amphibians, fish, invertebrates - they all matter to me. Similarly, I count lifer species regardless of whether I saw them wild or captive; my main goal is to photograph them alive. In the past, my trips were primarily centered around zoos, aquariums, and other captive collections, but this Costa Rica trip was my first mammal watching expedition in the wild. I spent 12 full days in the country, 9 of which were part of a tour studying tropical ecology and community-based conservation. My main goal for my solo leg of the trip was to visit the bat researchers Emmanuel Rojas at Tirimbina Lodge and Vino de Backer (WhatsApp: +506 8502 7056) in Monteverde, per the recommendation of my good friend Alex Meyer. Unfortunately for me, Vino happened to be doing an international expedition at the time. He still gave me tips and advice, though.

The tour group portion of my Costa Rica expedition was led by the amazing Dr. Marco Odio (WhatsApp: +506 8723 7465), a medical doctor who changed career paths and became a tour guide. He and his wife Aurora Gamez run Almonds and Corals Lodge (<https://www.almondsandcorals.com/contact-us/>), an ecotourism resort on the Caribbean coast with forests, beaches, and marine habitat. Nicknamed “Marcopedia” by Aurora, Marco is always happy to share his in-depth knowledge on anything having to do with Costa Rica: history, anthropology, agriculture, etymology of words, bird identifications, edible wild plants, etc. He is also well-connected with researchers and skilled at spotting wildlife in dense vegetation. It was an absolute joy and a great honor to hang out with him for 9 days. His tour was not specifically for seeing mammals, but it took me to some places that mammal watchers would not normally go.

I was in Costa Rica from the end of May to the beginning of June, which is the onset of their rainy season. At the time, the country was coming out of a drought so the rain was very welcome to the ecosystems, but there were times I had to refrain from taking photos and protect my camera gear because of thunderstorms and torrential downpours. It rained every day of my trip, although for no more than a few hours each in daytime, and the rain started and stopped at times I lacked the skill to predict. All things considered, the rain was not the worst hindrance and I was able to flexibly coexist with it day by day.

This report will include non-mammals I saw in the wild, and all captive mammals will be featured at the end. This is my first-ever Mammalwatching trip report, and I am happy to share it with you all.

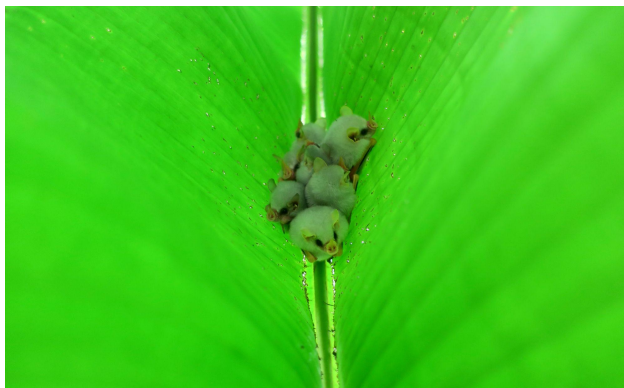
Itinerary

Day 1 (May 28, 2023) - SJO - Tirimbina Lodge and Centro de Vida Salvaje Jardín de Serpientes (O/N Tirimbina Lodge)
Day 2 (May 29) - Rescate Wildlife Rescue Center (Zoo Ave) and Refugio Animal de Costa Rica (Zoo Ave) (O/N Alajuela)
Day 3 (May 30) - Zoológico Simón Bolívar and Toucan Rescue Ranch (O/N Alajuela)
Day 4 (May 31) - San José - Monteverde (O/N Monteverde)
Day 5 (June 01) - Monteverde (O/N Monteverde)
Day 6 (June 02) - Monteverde (O/N Monteverde)
Day 7 (June 03) - Monteverde (O/N Monteverde)
Day 8 (June 04) - Monteverde - Estación Las Tortugas (O/N Estación Las Tortugas)
Day 9 (June 05) - Estación Las Tortugas (O/N Estación Las Tortugas)
Day 10 (June 06) - Bribri (O/N Yorkin)
Day 11 (June 07) - Bribri - Alajuela (O/N Alajuela)
Day 12 (June 08) - Rescate Wildlife Rescue Center (Zoo Ave) (O/N Alajuela)

Tirimbina Biological Reserve

Multiple sources told me that Tirimbina was the promised land for seeing wild bat diversity, and it really lived up to its reputation. I met Emmanuel in the morning after a long taxi ride from the airport hotel in Alajuela (over 3 hours), and without haste we set off on our hike around the jungle reserve to visit the bat roosts he had worked hard spotting in advance. An experienced researcher, he has spent about two decades in Tirimbina studying bat roosts, conducting mist net surveys, and cataloging birds, having published journal articles on various topics in tropical ecology.

The first species he brought me to see was the one I (and probably most people) had sought after the most: the **Honduran White Bat (*Ectophylla alba*)**. I had a great view of these little living mochi balls nestled in their leaf tent, a dream come true ever since I read about them in a rainforest book when I was a toddler. Nearby was a colony of **Thomas's Fruit-Eating Bats (*Dermanura watsoni*)**, a species we saw in several locations around the site.



Honduran White Bats (*Ectophylla alba*) (left) and **Thomas's Fruit-Eating Bats (*Dermanura watsoni*)** (right) in their leaf tent homes.

Crossing the bridge across the Sarapiquí River, Emmanuel pointed out a small troop of **Mantled Howler Monkeys** (*Alouatta palliata*) lounging in the trees. The bridge proved to be a useful wildlife corridor for them, as they scurried across the top to cross the river. Their vocalizations were an impressive and unignorable background presence throughout the day (and night). I would encounter this most widespread monkey in the country, again at Monteverde, wildlife corridor bridges over highways, and at the edge of the banana plantation where a boat picked me up to go to Estación Las Tortugas.



A **Mantled Howler Monkey** (*Alouatta palliata*) perched in the canopy overlooking the rope bridge.

On the other side of the Sarapiquí River were a series of rainforest trails; Emmanuel took me through many scenic spots and examined the trunks of massive *Ceiba* trees for sac-winged bats. He showed me a colony of **Lesser Sac-Winged Bats** (*Saccopteryx leptura*) with some nursing pups, a lone **Greater Sac-Winged Bat** (*Saccopteryx bilineata*), and I proudly spotted a **Thomas's Shaggy Bat** (*Centronycteris centralis*) with a pup. Even caught it on camera! (It wasn't me.) (Any Shaggy fans out there?)



Lesser Sac-Winged Bats (*Saccopteryx leptura*) with nursing pups (top left), a **Greater Sac-Winged Bat (*Saccopteryx bilineata*)** (top right), and a **Thomas's Shaggy Bat (*Centronycteris centralis*)** with a nursing pup (bottom left).

My favorite bat roosts were those I would have never seen without Emmanuel's expertise. He took me off trail to walk through shallow rocky streams searching under fallen tree trunks overhanging the creek. In the muddy darkness of the crevice, he shined a light, and voila!, a **Greater Dog-Like Bat (*Peropteryx kappleri*)** manifested itself. In another fallen tree he showed me a trio of the similarly rare **Chestnut Sac-Winged Bat (*Cormura brevirostris*)**. What a privilege to see these rare habitat specialists.



A **Greater Dog-Like Bat** (*Peropteryx kappleri*) (left) and three **Chestnut Sac-Winged Bat** (*Cormura brevirostris*) (right).

Outside the trails, Emmanuel took me to see bats in other spots around and near Tirimbina Lodge. A boiler room closet yielded a lone resident **Common Big-Eared Bat** (*Miconycteris microtis*), and on the outside rafters of a hut congregated a colony of **Proboscis Bats** (*Rhynchonycteris naso*). Emmanuel then brought me to a kitchen where I expected another bat only he knew the roost of, but as it turned out he just needed a glass of water. We were also given some fresh chocolate made on the grounds of Tirimbina, which used to be primarily a cacao plantation before it was turned into a protected area.



A **Common Big-Eared Bat** (*Miconycteris microtis*) (left) in a closet and **Proboscis Bats** (*Rhynchonycteris naso*) (right) on the beams of a straw hut.

In the afternoon, while Emmanuel hosted a separate program, I went to the serpentarium that was a 7-minute walk from Tirimbina Biological Reserve to photograph some local captive reptiles. Then as I walked out Tirimbina's main entrance, I saw the earth and leaf litter moving on the side of the footpath. To my delight, a juvenile **Nine-Banded Armadillo** (*Dasyus novemcinctus hoplites*) popped its head out and looked at me! I spent some time with two lodge staff members admiring it and another juvenile, probably a sibling, digging and rooting around the substrate for worms and insects.



A juvenile **Nine-Banded Armadillo** (*Dasypus novemcinctus hoplites*) foraging by the trailside.

Come nightfall, Emmanuel took me on my most anticipated portion of the day tour: my first bat mist netting! I helped him a bit in setting up two mist nets at varying heights in different portions of the trail overlooking the Sarapiquí River, while another coworker set up more nets in other parts of the reserve. The captured bats were also shown to some American high school groups on their tour before being released. In total we found eight or nine different species across two families: Vespertilionidae and Phyllostomidae - **Black Myotis** (*Myotis nigricans*), **Silver-Tipped Myotis** (*Myotis albescens*), what was possibly a **Riparian Myotis** (*Myotis riparius*), **Brazilian Brown Bat** (*Eptesicus brasiliensis*), **Thomas's Yellow Bat** (*Rhogeessa io*), **Seba's Short-Tailed Bat** (*Carollia perspicillata*), **Chestnut Short-Tailed Bat** (*Carollia castanea*), **Striped Yellow-Eared Bat** (*Vampyriscus nymphaea*), and **Pacific Tent-Making Bat** (*Uroderma convexum*). A day well spent - we saw 17-18 bat species in a single reserve!



Vesper bats found at Tirimbina by mist netting: **Black Myotis** (*Myotis nigricans*) (top left), **Silver-Tipped Myotis** (*Myotis albescens*) (top right), a possible **Riparian Myotis** (*Myotis riparius*) (middle left), **Brazilian Brown Bat** (*Eptesicus brasiliensis*) (middle right), and **Thomas's Yellow Bat** (*Rhogeessa io*) (bottom left).



Leaf-nosed bats found at Tirimbina by mist netting: **Seba's Short-Tailed Bat** (*Carollia perspicillata*) (top left), **Chestnut Short-Tailed Bat** (*Carollia castanea*) (top right), **Striped Yellow-Eared Bat** (*Vampyriscus nymphaea*) (bottom left), and **Pacific Tent-Making Bat** (*Uroderma convexum*) (bottom right).

San José Metropolitan Area

The second leg of my trip was visiting zoos and rescue centers around the capital that were all conveniently accessible via Uber from my City Express San José hotel. I relished the opportunity to photograph mammals in captivity that would be exceedingly difficult to spot in the wild, such as the **Costa Rican Oncilla** (*Leopardus tigrinus oncilla*). Found at Toucan Rescue Ranch, it's the only individual of this subspecies in human care. Zoos and wildlife centers in Costa Rica are often built into nature, making them excellent sites for birding and mammal watching, often seeing the same species inside and outside the enclosures. Rescate Wildlife Rescue Center in Alajuela, formerly known as Zoo Ave, provided excellent views of bold **Central American Agoutis** (*Dasyprocta punctata richmondii*) feasting on fallen food that captive macaws had dropped. Rescate Wildlife Rescue Center, Zoológico Simón Bolívar, and Refugio Animal de Costa Rica all proved to be excellent spots for viewing wild **Variegated Squirrels** (*Sciurus variegatoides rigidus*), which also took advantage of bird food trays.



Wild rodents in zoos looking for free meals: a **Central American Agouti (*Dasyprocta punctata richmondi*)** (left) and a **Variegated Squirrel (*Sciurus variegatoides rigidus*)** (right).

Monteverde

The first locale with wild mammals I went with the tour group guide Marco was Monteverde Cloud Forest Reserve, 1500 meters above sea level. The primary purpose of this leg of the trip was to study cloud forest ecology, birds, ecotourism, and community-based conservation.

One afternoon my group heard demonlike screeching laughter from far overhead. Searching for the culprit, we spotted a troop of **Ornate Spider Monkeys (*Ateles geoffroyi ornatus*)** deftly climbing around liana-covered trees in the emergent layer. We encountered this species two out of four days in Monteverde. Expert guide Germán led us on another day hike to find nesting **Resplendent Quetzals (*Pharomacrus mocinno costaricensis*)**, the most famous animal species of the region that every ecotourist wanted to see. Along the way, we encountered a **Central American Dwarf Squirrel (*Microsciurus alfari*)** eating shelf fungi from a tree trunk. Some of my group members also spotted a **Southern Cotton Rat (*Sigmodon hirsutus*)** that had made a home between some stones on the side of a garden by the park's gift shop.

For me, the most exciting mammals of Monteverde were the ones I saw on Germán's night hike tour. As an experienced guide, Germán and his colleagues share a lot of their observations and sightings with one another, from quetzal nests to the daily whereabouts of individual stick insects and tarantulas. That night he showed us and provided in-depth explanations of bioluminescent beetles, orchids, and tree frogs, but warned us mammals might be hard to spot. Due to a full moon, foraging arboreal mammals would be more elusive to avoid being seen by predators. Germán took us to a series of fig trees to spot a hard-to-spot mammal who liked to feast on ripe figs. We had practically given up and started heading back when at 8 pm, he glimpsed something darting around in the canopy: a **Northern Olingo (*Bassaricyon gabbii*)**! We watched in awe, as the lithe critter effortlessly scampered through the treetops. After the night tour, Marco showed me a good spot for nectar-eating bats (likely **Commissaris's Long-Tongued Bat? (*Glossophaga commissarisi*)**): the Hummingbird Café by the park's entrance. This lovely establishment in daytime is a prime spot for watching hummingbirds

feasting on sugar water right in front of guests' faces, but in the evening, after the café closes, the animal night crew takes over and bats become the main event. A particularly clumsy one even smacked me in the back of my head as it flew by!



Diurnal mammals at Monteverde: an **Ornate Spider Monkey** (*Ateles geoffroyi ornatus*) (left) and a **Central American Dwarf Squirrel** (*Microsciurus alfari*) (right).



Every birder's dream: a male **Resplendent Quetzal** (*Pharomacrus mocinno costaricensis*) chowing down on a small wild avocado.



The only shot I could make of a Northern Olingo (*Bassaricyon gabbii*).



Hummingbirds of Monteverde: **Violet Sabrewing** (*Campylopterus hemileucurus mellitus*) (top left), **Lesser Violetear** (*Colibri cyanotus cabanidis*) (top right), **Purple-Throated Mountaingem** (*Lampornis calolaemus calolaemus*) (middle left), **Coppery-Throated Emerald** (*Microchera cupreiceps*) (middle right), and **Green-Crowned Brilliants** (*Heliodoxa jacula henryi*) (bottom left).

Estación Las Tortugas

After Monteverde, Marco's tour took me on a loop around Arenal Volcano, where we saw a **White-Nosed Coati** (*Nasua narica narica*) safely crossing a highway. We took a 6-hour route across the country's northeast to get to the Caribbean Coast. Situated in Mondonguillo Beach in Limón Province, Estación Las Tortugas is quite a remote research station. The bus dropped us off at the edge of a banana plantation overlooking a canal, and ferrymen came in motorboats to take us to the beachfront station that studies and protects sea turtles. Our boat ride took us through a series of winding rivers and canals that even had road signs, as well as excellent birding.

Estación Las Tortugas is private property owned by Stanley Rodriguez, who made his beach a protected area to combat sea turtle egg poaching. The organization he founded provides jobs to the local community, having converted turtle poachers into turtle protectors and tour guides. In May and June it is leatherback season, where exclusively **Leatherback Sea Turtles** (*Dermochelys coriacea*) excavate nests on the beach. **Green** (*Chelonia mydas*) and **Hawksbill** (*Eretmochelys imbricata*) have their turn on the beach later in summer. We went on nocturnal turtle patrols after dusk and saw mother leatherbacks hard at work under a full moon. Turtle station staff collect the eggs in a plastic bag and transfer them to an enclosed hatchery section on the beach that is far above high tide, greatly increasing their survival rate. Hatchlings are measured and weighed before being released into the Caribbean Sea.



Authorized personnel only: a hatchery protecting sea turtle eggs from predators and the elements.

Sea turtles are not the only giant reptiles that hatch in this sanctuary. A lagoon adjacent to the beach was home to a mother **American Crocodile** (*Crocodylus acutus*) and her hatchlings, who were less than a week old when I observed them from the water's edge. We also found an open nest mound with eggshells, proving the babies had emerged recently. I have to admit it was a bit unsettling when the mother croc was out of my line of sight!



A baby **American Crocodile** (*Crocodylus acutus*) among aquatic foliage.

The research station's accommodations were simple rooms that lacked electricity, with four people to a bathroom consisting of a sink and shower under a roof. The intentional gaps in the room walls meant we were not fully indoors and remained one with the jungle, which meant there were constantly little visitors and roommates. American high schoolers on a class trip complained about crabs getting in their rooms. In our group's rooms we also encountered juvenile **Green Iguanas** (*Iguana iguana*), **Plumed Basilisks** (*Basiliscus plumifrons*), **Cane Toads** (*Rhinella marina*), The only wild mammal we saw in the area were groups of **Pallas's Long-Tongued Bats** (*Glossophaga soricina*), as identified by Vito examining my photos based on appearance and location, roosting over my friend's bed and flitting around all of our rooms! One of the most memorable sights from this lodge was seeing a **Blue Land Crab** (*Cardisoma guanhumi*) feasting on a desiccated bat carcass in my friend's bathroom. Understandably this type of accommodation is not for everyone, but I highly recommend it to other folk who would be amused by sharing a bedroom with wild animals.



Pallas's Long-Tongued Bats (*Glossophaga soricina*) make for good roommates.



Circle of Life: a Blue Land Crab (*Cardisoma guanhumi*) scavenging on a bat carcass.

Bribri

The final stop on our group tour was Talamanca, also in Limón Province but on the Panamanian border. We went for an overnight stay with the indigenous Bribri tribe in the Talamanca Bribri Indigenous Territory. After having no luck with wild sloths in the first few legs of the trip, our guide Marco spotted one in a *Cecropia* tree on the way to the town of Bribri. Our bus pulled to the side of the road and we got out to observe the foraging **Brown-Throated Three-Toed Sloth** (*Bradypus variegatus ehippiger*). Shortly after, during a canoe ride along the Sixaola River, the canoe before me reported seeing a **Neotropical Otter** (*Lontra longicaudis annectens*) on a rocky riverbank, but it had fled before I reached that spot.



One of Costa Rica's most iconic symbols: a **Brown-Throated Three-Toed Sloth** (*Bradypus variegatus ehippiger*).

In conclusion, my May-June 2023 Costa Rica trip was a worthwhile and extremely fun experience, for me a great first foray into the world of mammal watching. Tirimbina Biological Reserve is the perfect beginner's place to attend a bat mist netting, and seasoned bat watchers will still have much to see there as well. Exploring Monteverde Cloud Forest Reserve yields some more interesting mammals. Finally, even if your primary goal in Costa Rica is birding, biking, outdoor sports, or relaxing, keep your camera ready at all times, because you never know when and where a fascinating mammal might appear!

Species List of Wild Mammals Seen

- 1) Mantled Howler Monkey (*Alouatta palliata*)
- 2) Nine-Banded Armadillo (*Dasypus novemcinctus hoplites*)
- 3) Thomas' Fruit-Eating Bat (*Dermanura watsoni*)
- 4) Honduran White Bat (*Ectophylla alba*)
- 5) Thomas's Shaggy Bat (*Centronycteris centralis*)
- 6) Greater Dog-Like Bat (*Peropteryx kappleri*)
- 7) Chestnut Sac-Winged Bat (*Cormura brevirostris*)
- 8) Greater Sac-Winged Bat (*Saccopteryx bilineata*)
- 9) Lesser Sac-Winged Bat (*Saccopteryx leptura*)
- 10) Proboscis Bat (*Rhynchonycteris naso*)
- 11) Common Big-Eared Bat (*Micronycteris microtis*)
- 12) Seba's Short-Tailed Bat (*Carollia perspicillata*)
- 13) Black Myotis (*Myotis nigricans*)
- 14) Silver-Tipped Myotis (*Myotis albescens*)
- 15) Riparian Myotis? (*Myotis riparius*)
- 16) Brazilian Brown Bat (*Eptesicus brasiliensis*)
- 17) Thomas's Yellow Bat (*Rhogeessa io*)
- 18) Chestnut Short-Tailed Bat (*Carollia castanea*)
- 19) Striped Yellow-Eared Bat (*Vampyriscus nymphaea*)
- 20) Pacific Tent-Making Bat (*Uroderma convexum*)
- 21) Variegated Squirrel (*Sciurus variegatoides rigidus*)
- 22) Central American Agouti (*Dasyprocta punctata richmondi*)
- 23) Ornate Spider Monkey (*Ateles geoffroyi ornatus*)
- 24) Central American Dwarf Squirrel (*Microsciurus alfari*)
- 25) Northern Olingo (*Bassaricyon gabbii*)
- 26) Commissaris's Long-Tongued Bat? (*Glossophaga commissarisi*)
- 27) White-Nosed Coati (*Nasua narica narica*)
- 28) Pallas's Long-Tongued Bat? (*Glossophaga soricina*)
- 29) Brown-Throated Sloth (*Bradypus variegatus ephippiger*)

Species List of Notable Captive Mammals Seen

Zoológico Simón Bolívar

- 1) Central American Jaguar (*Panthera onca centralis*)
- 2) Costa Rican Raccoon (*Procyon lotor crassidens*)
- 3) Mexican Hairy Dwarf Porcupine (*Coendou mexicanus*)



Jaguars in zoos usually cannot be identified to subspecies level, but this rescued individual can:
Central American Jaguar (*Panthera onca centralis*).



The **Mexican Hairy Dwarf Porcupine** (*Coendou mexicanus*) is rare in captivity outside its native range.



A pair of **Costa Rican Raccoons** (*Procyon lotor crassidens*), which is a noteworthy subspecies.

Rescate Wildlife Rescue Center (formerly Zoo Ave)

1. Black-Crowned Central American Squirrel Monkey (*Saimiri oerstedii oerstedii*)
2. Grey-Crowned Central American Squirrel Monkey (*Saimiri oerstedii citrinellus*)
3. Central American Jaguar (*Panthera onca centralis*)
4. Costa Rican Puma (*Puma concolor costaricensis*)
5. Central American Margay (*Leopardus wiedii nicaraguae*)
6. Costa Rican Gray Fox (*Urocyon cinereoargenteus costaricensis*)
7. El Salvador Coyote (*Canis latrans dickeyi*)
8. Central American White-Tailed Deer (*Odocoileus virginianus truei*)
9. Costa Rican White-Lipped Peccary (*Tayassu pecari spiradens*)
10. Variegated Squirrel (*Sciurus variegatoides*)
11. Central American Agouti (*Dasyprocta punctata richmondi*)



Subspecies comparison between the **Black-Crowned Central American Squirrel Monkey** (*Saimiri oerstedii oerstedii*) (left) and the **Grey-Crowned Central American Squirrel Monkey** (*Saimiri oerstedii citrinellus*) (right).



The **El Salvador Coyote** (*Canis latrans dickeyi*) is practically hairless compared to its North American cousins.



A curious **Costa Rican White-Lipped Peccary** (*Tayassu pecari spiradens*) looking up.

Toucan Rescue Ranch

1. Costa Rican Oncilla (*Leopardus tigrinus oncilla*)
2. Neotropical Otter (*Lontra longicaudis annectens*)
3. Tayra (*Eira barbara inserta*)



The smallest wildcat in the country, the **Costa Rican Oncilla** (*Leopardus tigrinus oncilla*), is also the hardest to see in the wild. Joel Sartore once went to Toucan Rescue Ranch to photograph this handsome fellow.



The **Neotropical Otter** (*Lontra longicaudis annectens*) cannot be seen in captivity outside its native range.



This **Tayra** (*Eira barbara inserta*) has a darker pelage than most.

Refugio Animal de Costa Rica

1. Grey-Crowned Central American Squirrel Monkey (*Saimiri oerstedii citrinellus*)
2. Central American Margay (*Leopardus wiedii nicaraguae*)
3. Central American White-Tailed Deer (*Odocoileus virginianus truei*)



What a gorgeous **Central American Margay** (*Leopardus wiedii nicaraguae*).



The **Central American White-Tailed Deer** (*Odocoileus virginianus truei*) is much smaller than its North American relatives, and harder to see in the wild, too.