

When you choose Adventure Geology Tours, we take you to all the famous "selfie spots" that you've seen on social media, but unlike your friends who visited, you will walk away with a deeper appreciation of nature through the geologically-focused lectures and daily interpretations.

Additionally, our tours offer many more active experiences than the big-box competitors. Our locations can take you to volcanoes, hot springs, fumaroles, waterfalls, beaches, rain forests, and more. Plus, as an added bonus, the charismatic company owners are a heck of a lot of fun! "Active exploration with enthusiastic geologists" is our company mantra. Consider joining our trips as a solo-traveler, couple, family, or group and let's learn some geology!

Geologist and international researcher, Dr. Tamie J. Jovanelly, is classically trained as a hydrologist and has completed water quality assessments on 5 continents comparing developed, undeveloped, and developing countries while focusing on

major river systems (Nile, Ganges, Amazon, Mississippi, etc). Through her second Fulbright Research Scholar position, Dr. Jovanelly completed a complex survey of watersheds in 13 National Parks in Costa Rica whereby identifying the absolute importance of clean water in supporting the country's rich biodiversity. She is a Geological Society of America Fellow (2021).



- www.costaricageologytours.com





A COUNTRY MADE FROM MAGMA

Costa Rica is an equatorial country that is located in Central America. It is here that two tectonic plates (Cocos Plate and Caribbean Plate) collide to form five distinct mountain ranges that elevate to more than 13,000 feet above sea level. One of those mountain ranges, the Cordillera de Talamanca in the Central Highlands, forms a continental divide separating two drainage basins. That is, water falling on the eastern flank drains into the Caribbean Sea, while water falling on the western flank drains into the Pacific Ocean. This extensive northwest-southeastern mountain belt also significantly impacts area climate with the Caribbean flank receiving > 118 inches of annual precipitation and the Pacific flank receiving < 118 inches, thus creating rainforest conditions. These tropical conditions support 500,000 species which represent 4% of the total species estimated worldwide.

Although this country may best be known for its rich biodiversity, this small country (~20,000 mi²) is home to six active volcanoes and 61 dormant volcanoes. No doubt, the volcanoes of Costa Rica are some of the most photographed in the world—as their dramatic calderas are often filled with emerald waters that add to their beauty—and mystery. Natural hot springs, fumaroles, bubbling mud pots, and milky-blue rivers laden with silica are common features found in the shadows of the steep volcanic flanks. In some locations volcanic maars have even formed—that is a crater resulting from a one-time steam eruption! Additionally, it is the intricacies of lava flows that have created Costa Rica's impressive waterfalls which provide a unique cross-section of geologic time.

ABOUT THE TOURS

Undoubtedly, the natural beauty and biodiversity found in Costa Rica is supported by the country's active geologic history. That is, without volcanic eruptions adding minerals to the soil content regularly, the lushness of the landscape would soon fade. Taking a guided tour of the country with a geologist will not only help you to capture the country's natural beauty, but increasingly enhance it through detailed descriptions linking the relationship between structure, process, and time to the country's evolution.

These tours are intended for people who are interested in learning about the formation of the many unique landscapes found in Costa Rica. Please note that a background in geology is not necessary to be a trip participant. Instead, prior to trip departure, Dr. Jovanelly will provide you with introductory-level videos and reading materials that will highlight relevant geological concepts (e.g. plate tectonics, rock cycle, volcanics). This background material will build your foundational knowledge in geology so that you will be prepared to engage in more advanced content as presented during the trip.

Also, please know that the content for the trip can be altered for school or university groups who are interested in learning advanced concepts.

"AMAZING PROGRAM! I have a background in geology, and she had enough info for people with some knowledge and complete novices alike. Well done."

-Smithsonian Associates Short-Course Participant

For the cost of the trip you will receive:

- 7-night resort-style accommodations with private bathroom and breakfast included
- 5 traditional Costa Rican-style lunches
- All in-country transportation
- Geology interpretation at field sites
- 3 lectures on Costa Rica geology by local professional geologists
- 2 social reception with beverages
- Color printed field guide

- Adventure Geology Tours Costa Rica t-shirt, fancy logo water bottle, stickers
- Paid admission to: Parque Nacional Volcan Poas, Arenal National Park, La Fortuna Waterfall, Arenal Hanging Bridges, Lake Arenal Boat Cruise, Cavernas de Venado and Guided Tour, Monte Verde Biological Reserve and Guided Tour, Manuel Antonio National Park and Guided Tour, Parque Nacional Volcan Irazu

*per double occupancy; airfare not included

SAMPLE ITINERARY

Book an

excursion

Day 1 Arrive in the afternoon at Juan Santamaria International Airport in San Jose, Costa Rica where you will transfer to your accommodations at the base of Volcano Poas. You will have free time at this resort-style lodge until we convene as a group for a Meet δ Greet social hour with beverages and h'orderves before listening to a lecture by a Costa Rican researcher.

We had so much fun WHILE we were

learning!"

Day 2 The day will be spent exploring Parque Nacional Volcano Poas with a local guide. The tour will be followed by lunch served at the park. A beautiful drive will end in the city of hot springs, La Fortuna, where you will have time to soak in geothermal hot tubs before and after dinner at the boutique hotel that is in the shadows of Volcano Arenal. Your evening will conclude with a lecture presented by a Costa Rican volcanologist.

Day 3 This fun-filled day will begin with a 2-mile guided hike at Arenal Volcano Park where we will explore modern (1968-2010) lava flows. Next, we will visit La Fortuna Waterfall at the base of the dormant volcano Cerro Chato. Here, you have the opportunity to view these historical (circa 38,000 years ago) lava flows up-close, and then have the option of swimming, hiking, or lounging in the beautiful scenery. After a morning of adventures, you will enjoy a delicious lunch. Our last stop is a visit to the Arenal Hanging Bridges for a 2.5 hour walk along 16 hanging bridges over 3 kms where you can observe the topography from a bird's-eye view. Your evening will be spent relaxing in geothermal hot springs at the resort.

Day 4 Today's adventure will take us underground on a 2-hour caving experience at Cavernas De Venado. This 15-20 million year old limestone cave is among the best in Costa Rica as it exposes the fossil record, has an active subterranean waterfall, and provides text-book examples of stalactites and stalagmites. Lunch will be provided before we take a leisurely boat cruise across Lake Arenal to our overnight accommodations near Monteverde Cloud Forest.

Day 5 We will awake for a guided tour in the cool mountain air that is unique to the cloud forest of the Monteverde Biological Reserve. This unique climatic regime, and in-turn the forest's interesting hydrology, will be highlighted as we begin to understand the complexities of warm Caribbean air colliding with the upper elevations of the Cordillera Tilaran. After our tour, we will have lunch amongst the hummingbirds before we head south to the Central-Pacific Coast and Costa Rica's most famous rainforest, Manuel Antonio. An evening lecture will be presented by Dr. Jovanelly focusing on importance of hydrology to the protection of Costa Rican National Parks.

Day 6 An early morning will find us in the Manuel Antonio National Park with a forest guide as the animals begin to awake. Costa Rica's rich biodiversity will be highlighted with a guided-tour of Manuel Antonio National Park. It is here that you will be able to get your Instagram photos of sloths, white-faced capuchin monkeys, frogs, butterflies, and more. After the 3-hour stroll in the National Park you will be free to stay and enjoy the beach, walk to town for shopping and lunch, or go back to the resort for pool-side rest and relaxation.

Day 7 Learn about Volcano Irazu before heading to this National Park for the afternoon. The group will have lunch in the shadows of Volcano Irazu before trekking back to San Jose for a farewell reception with beverages, h'orderves, and lecture by Costa Rican volcanologist.

Day 8 Stay for the morning to enjoy the hotel pool and amenities, or depart for Juan Santamaria International Airport at your leisure using the hotel shuttle.