



NEVITABLE GALAPAGOS



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Text and photos are provided by the author

The Galapagos Islands are the world's most famous archipelago; the cradle of a unique natural richness and of Darwin's discoveries, including his famous theory of the origin of species. The characteristic animals of these islands are stars of evolution and do not suffer scenic fear; naturalists and tourists can approach them without fear of scaring them even though they are protected and they cannot be touch; only them can walk around without restrictions. While it is a costly trip, there are ways to visit its islands at low costs if certain steps are taken.

If there is any place in the world where every naturalist agrees to want to know,

this is undoubtedly the world's most famous archipelago: the Galapagos. We all know the species that live there, we've all seen them countless times in documentaries on TV. But who do not want to look closely at these giant turtles, these sea iguanas, these nice birds that don't run away when man appears in distance?

Galápagos is synonymous with primitive nature, an unparalleled underwater world, tropical penguins and sea lions, boobies and swimming iguanas. But above all it is a place that fanatic Christianity dislikes. This is where the theory that shook all the foundations of creationism was born, the



Figure 1. Young marine iguana (*Amblyrhynchus cristatus* Bell, 1825) at Puerto Ayora, main town in Galapagos.



Figure 2. Santa Cruz lava lizard (*Microlophus indefatigabilis* Baur, 1890), omnipresent in that island.

patio of experiments of a genius who gave the nail, since his theory is no longer an idea, but a well-proven fact.

Charles Darwin arrived in the Galapagos in September 1835, and there he began his collection of specimens, among which are the different varieties of finches he captured on the different islands. Among other observations, observing at the various varieties of finches and tortoises would help him in the future to elaborate a theory that, although currently more than proven, still has severe detractors, the religious fundamentalists.

The similarity of the finches of different islands was evident to Darwin, but each of them was adapted to a different diet, and that was externally denoted in the shape of their peaks. Some of them were fat and powerful to break hard grains, others were elongated to pinch small insects, and others were like stitches for pinching birds and extracting their blood. These observations, along with those of the different shapes of the shells of the tortoises that came from dry or wet islands (those of dry islands had the front part of the skull very high and the neck enlarged to be able to look for fruits of cactus and other succulent plants that do not grow

on the ground, while the ones that inhabited wet habitats could pasture the grass on the soil and their necks were shorter with a shell more similar to the land tortoises, we all know).

Of course, on arrival in the Galapagos, a naturalist (even an ordinary tourist) wishes to be able to see all these protagonists of evolution, not only because their exoticism, but for how easy it is to approach them without being frightened. I've seen thousands of frigate birds flying in other parts of the world, but never nesting 2 meters from me without being disturbed. Marine iguanas and land iguanas have always been among my favorite animals... besides the giant land tortoises, and the stunning marine world, which cannot be left aside. Although a trip to Galápagos has a reputation for being expensive, there are ways to reduce spending and see most interesting species and places at a backpacking price (see at the end).

There are two airports on the islands, that of the capital San Cristobal, and that of Bartra, which supplies the most populous island, Santa Cruz (with a population of around 25,000). Usually one arrives at Bartra and stays a few days in Santa Cruz. On this island the first thing that we will discover when walking through the village of Puerto

Ayora, is a bunch of sea lions (*Zalophus wollebaeki* Sivertsen, 1953) that camp at its widths. They are the kings of the village, especially in the *malecón* (the typical front coast walking promenade in Latin American coast towns), the harbor, and very especially in the fisheries, where fishermen or fishmongers must pay their tribute to those reckless inhabitants, but they also penetrate inside the town through some streets, so much so that you can find one napping at a bench anywhere. Of course, all the animals in the Galápagos are protected, and no one can touch them, but they can roam freely. Many of them, especially the younger specimens, are found playful swimming in the crystal clear waters of the town coast and mangroves. In the port itself, at night, when it is illuminated, typical lovers' promenade, it is possible to see sharks of medium and small size swimming slowly along with rays of various species.

Another inhabitant of the village, and indeed, of all the islands, is the famous marine iguana (*A. cristatus*). In the village itself, it is difficult to see adult specimens, but juveniles are all over, both in the *malecón* and in all coastal areas. In fact, there are many opportunities to observe them. The first thing I got was going to Tortuga Bay, a half-hour walk from the village, crossing a xerophytic area where finches abound. If you arrive in the afternoon, between 16.00 and 15.00 h, you can see the iguanas coming up from the sea...

They have been swimming all day basically feeding on algae, but they



Figure 3. Las Grietas, a narrow cold sea water canyon easy to visit from Puerto Ayora.



Figure 4. Adult female of *M. indefatigabilis*.

have lost their body heat, and already in the afternoon they go to reheat and rest on the beach. They come out of the water slowly, walking as if there was no one on the beach, which belongs to them. Tourists, of course, are like non existing for them. If you respect their space, you will be allowed to take amazing photos very closely. If someone recognizes these sea iguanas, it may not be for the documentaries, but for the film *Godzilla*, which was based on them. And in fact, of the 11 recognized subspecies, one, the Isabela Island, is called *Amblyrhynchus cristatus* subsp. *godzilla* Miralles & Macleod, in honor of the huge monster. The subspecies that we will see most commonly if we go to Santa Cruz, Isabela and Floreana, are *Amblyrhynchus cristatus* subsp. *hassi* Eibl-Eibesfeldt, 1962, *A. c. godzilla* and *Amblyrhynchus cristatus* subsp. *venustissimus* Eibl-Eibesfeldt, 1956, respectively. There are other places to see

marine iguanas as well, such as on the island of Isabela, where they are also abundant on any beach, or in Floreana, where they are beautiful, with black and pinkish red spots (those from Santa Cruz and Isabela are black).

Another reptile he wished to observe in his natural environment was the terrestrial Iguana. (*Conolophus subcristatus* (Gray, 1831)). But they are almost extinct from the large islands, so you have to search them in the satellite islands of Santa Cruz for example, such as Seymour North or Plaza Sur. I was eager to be able to photograph them in their habitat, but I never imagined that they were so abundant and blurred. They walked around the island without paying attention to people, crossing, sunbathing and feeding on cactus (*Opuntia*) without any trouble to be punched by this unappealing meal. Land iguanas are gregarious, and in some spots was possible to see several animals close by.



Figure 5. A portrait of an adult male marine iguana.



Figure 6. Magnificent adult male marine iguana (*A. c. hassi*) at Tortuga Bay.

This same North Seymour Island is a paradise for sea bird observers. At least four precious birds nest here, the swallow-tailed gulls (*Creagrus bifurcates* (Nébox, 1842)), the blue-footed booby (*Sula nebouxii* Milne-Edwards, 1882) and two species of frigate birds (*Fregata magnificens* Mathews, 1914 and *Fregata minor* (Gmelin, 1789)). Gulls are

observed in the coast breaker, but frigates and boobies breed in the interior of the island. Boobies are especially gentle, allowing to approach even while in the nest. Its mating parade is striking, consisting of a deployment of the male's wings, while lowering the neck and raising the head and tip. The female, in general, seems indifferent to such attention,



Figure 7. A Coastal leaf toed gecko, *Phyllodactylus reissii* Peters, 1862, the original occupant of my room at Puerto Ayora.



Figure 8. A magnificent frigate adult male in breeding disposition with its mate.



Figure 9. A mating display of blue footed boobies.

making the situation quite funny. The scene seems just being part of a Jurassic spectacle. The frigates, as is known, are the pirates of the air, and they are not fishing birds, they like to chase boobies and pelicans to take away their fish. They are common in all tropical seas, but it is not easy to approach their breeding colonies. For example, in Costa Rica, these

are found on a few rocky inaccessible islets. It is a visual pleasure to be able to see the magnificent males with their intense red gular deployment, which stands out over the black of the rest of the plumage.

Another typical bird of the Galápagos, but few imagine in the tropics, is the Galapagos Penguin (*Spheniscus mendiculus* Sundevall,



Figure 10. *C. hoodensis* at the Charles Darwin Biological Station, Galapagos.



Figure 11. The author with a recently generated carapace.

1871), the only real tropical penguin (although the Humboldt Penguin can also reach tropical latitudes at certain times of the year). To observe it, the easiest way is to head to Isabela's harbor. They are quite playful and can be seen even in the port where boats anchor, swimming among huge green turtles.

It is also an unexpected pleasure to swim with sea lions, which can approach you with the mere purpose of playing around and examining you, long and strange ape, swimming quickly...

Finches are not as striking animals as the others. They are black or brown birds, but they stand out not only for their evolutionary importance as living examples of this fact, but for their elaborate behavior. You can see finches everywhere, in the village, on the beaches, in dry areas and wet forests.

Undoubtedly, the most recognized representatives of the islands are the land tortoises. In the Galápagos (remember that galápagos is a Spanish term for turtle in

general), there are eleven species of land turtles, four of which are already extinct. The last extinct species was *Chelonoidis abingdonii* (Günther, 1877), represented by the last single male, "Lonesome George". She was searched for females on her home island, Santa Cruz, but found none. He spent his last years spoiled at the famous Charles Darwin Biological Station. With him, another species of the planet sadly disappears.

This station, along with another on Isabela Island, is responsible, among other research tasks, for breeding and raising the different species of Galápagos terrestrial chelonians, to reintroduce them into their natural habitat. Santa Cruz island there is an opulent population of terrestrial turtles (*Chelonoidis porteri* (Rothschild, 1903)), from lowlands to high and humid areas, where the larger specimens are found. The southern Isabela tortoises (*Chelonoidis vicina* (Günther, 1874)) are somewhat smaller in size, as are those at Española (*Chelonoidis hoodensis* (Van Denburgh, 1907)).



Figure 12. *C. porteri* from Santa Cruz Island, Galapagos.



Figure 13. *A. c. venustissimus*, the Floreana marine iguana, with pinkish red and black coloration.



Figure 14. An impressive adult male of *C. subcristatus* standing in front of some frigate birds at Seymour Island.



Figure 15. Portrait of the formidable claws of a land iguana.

Other ubiquitous reptiles with little attention, compared to their larger cousins and turtles, are the lava lizards (genus *Microlophus*). There are 10 species spread across all islands, the most observed being *M. indefatigabilis* in Santa Cruz and *Microlophus albemarlensis* (Baur, 1890) at Isabela. Their common name, lava lizards, comes from the fact that almost all of the substrate of the islands is volcanic, so it is very common to see these saurians (as well as iguanas) wandering through the abundant black lava that forms the islands. These lizards are omnivorous, preying on insects, other smaller lizards, fruits and seeds. Sometimes it is fun to watch them swinging the horizon mounted on some impassible marine iguana. They are eaten by reptiles, snakes, and introduced species such as cats and rats.

Unfortunately, during this visit, I did not have the chance to observe live snakes (only a newly D.O.R one). A scene in a BBC documentary is famous, in which snakes of the genus *Pseudalsophis* chase newly hatching offspring of sea iguanas very quickly. There

are nine species on the islands, of diurnal and terrestrial habits; they are extremely fast and difficult to catch.

Another dream to fulfill someday, although it is very difficult to get the right permits, is to visit the pink land iguana (*Conolophus marthae* Gentile & Snell, 2009) in its own natural habitat. This species is highly endangered (there is an estimate of around 250 individuals left) and the access to Volcan Wolf is highly restricted.

A visit to Galápagos cannot end without entering its fantastic underwater world, even if you're not a diver. Just half a meter deep you can already observe with a mask and a simple snorkel an impressive variety of fish and marine invertebrates, from moray eels to stingrays. If you go a little further, there are sea turtles (especially *Chelonia mydas* (Linnaeus, 1758)), sea horses, sea lions and some harmless sharks. Already with diving equipment, you can perform unparalleled dives, observing Galapagos sharks, manta rays, whale sharks and many other wonders.

Apart from the fauna, the Galápagos possess an undoubted landscape charm,



Figure 16. A satisfied land iguana eating and enjoying a spiky cactus fruit.

especially due to its volcanic origin. Several volcano craters can be visited, such as Los Gemelos in Santa Cruz, or Sierra Negra in Isabela, which seems the horrific landscape of Mordor.

Tips for travelling to Galápagos at a reasonable price*

If you start to see cruise prices that take you to the different islands, you can fall back. There are specials for divers (the most expensive), from 8 to 16 days, or shorter. The price will vary depending on the days and the quality of the boat used. But if we focus on a trip that is accessible to many of us, my recommendation would be the following. The flight, unfortunately for non-residents in Ecuador, will be the most expensive, around \$450 and \$500. The entrance fee to Galápagos includes multiple entries to the national park (basically the entire archipelago) and costs US\$ 110. That means that by arriving

you have already spent around \$600 without doing or seeing anything!!! Well, let's not despair. You get to the airport of the small island of Baltra, where a free bus (one of the few things free on the islands) takes you to a small ferry to cross to Santa Cruz (one dollar). From there you have to take another bus to the village of Puerto Ayora, on the other side of the island, this takes approximately one hour (3 \$). Fortunately, looking well, there are several hostels for \$25 a night, single room with bathroom, or \$15 in shared room. Of course if you are willing to pay more there are accommodations of all price and luxury. In my room I saw quickly a coastal leaf toed gecko *P. reissi*. In order to eat, you can head to Hunger Street or Calle del Hambre (very close to the *malecon*), for \$5 the basic lunch (soup and second dish, without great pretensions).

I enthusiastically recommend for breakfast a dish that I loved so much, *guatita* (tripes in peanut sauce with rice). There are two excursions that one can do for free on his

own. One is the mentioned walk to Tortuga Bay (although the last comments say that you must now hire a guide). You must bring plenty of water (at least 2 liters for 2 hours), sunscreen and swimming suits. Ask any inhabitant of the village how to go, it only takes half an hour and you can see the marine iguanas on the beach. Another mini trip is to Las Grietas, a narrow canyon occupied by sea water, deep and cold, but beautiful, and with crystal clear waters. To do this you have to go to the harbor and order a water taxi (one dollar min.), and tell him to leave you to visit las Grietas, according a return hour. The path is taken from the landing ground and you do not leave it until you arrive. You can stop at a beautiful beach where you can swim and observe morays and stingrays. In Las Grietas you can swim too, there are some dwarf fish, and apparently no dangerous animals, only many wasps so it is wise have to carry antihistamines in case of being stung.

In Puerto Ayora you can also visit the facilities of the Charles Darwin Biological Station for free. The part for the public is like a mini zoo where the different species of the islands are observed, including the land tortoise nursery.

The rest of the visits are paid, some in shared tours or solo. For example, to see the largest tortoise population of the islands, in El Chato, I hired a tour for myself that cost me \$40, with guide and transportation, including also a visit to the twin craters and the caves known as Lava tunnels (quite interesting!).

A one-day tour to Floreana Island costs \$70. The truth was the one I like the least. I was sick of the sea, and the people were very dizzy during the two-hour journey back and forth. You see more tortoises, but this time in semi-captivity (much better at El Chato). It's a wet island with a grotesque history, but for me nothing special. For those who want to see red and pink marine iguanas (*A. c. vesnustissimus*) it is the nearest and cheapest place to do so. The tour to Seymour North is highly recommended; there you will see the famous land iguanas, boobies, gulls and frigates, and also a dream snorkel in shallow water. Luckily you can see some penguins. But it's the most expensive tour, \$140 a day (lunch included).

To Isabela you can go on a day tour, which I do not recommend because of how far away it is (more than 2 hours one way) and how interesting it is to stay there. It is best



Figure 17. An adult female and young marine iguanas at Isabela (*A. c. godzilla*).



Figure 18. An adult female *Chelonoidis guntheri* (Baur, 1889) at Isabela Island.

to go on your own, each ticket costs \$30 (each way). I stayed in a cheap hostel that costed met \$25 in a single room! The meals are a little more expensive than at Sta Cruz, \$7. There are several interesting tours. One is to the Tintorerías, which can be in the morning or in the evening, lasts about 3 hours, including a walk through the volcanic area seeing marine iguanas, plenty of penguins and a sea crack where several sharks rest. Includes a snorkel (60\$).

Another tour is to go see Sierra Negra volcano. It's about 10 km between going and going. If it's clear, you can see one of the

world's largest volcanic craters. But it's better to go in dry season. After walking another hour, you arrive at Volcán Chico, which is not small at all. There are a series of smoke holes and craters not too large, but you can see the results of several recent eruptions, the last in 2005, with its lava rivers, etc. The feeling is walking towards Mordor. The tour includes a snack and costs \$50.

Another recommended tour is to the tunnels, eminently one day at the sea, you visit several islets where the blue-legged boobies' nest, and snorkeling is one of the most fascinating I ever done in my life: you see several huge sea green turtles (*Chelonia*), grazing quietly and letting approaching enough, sea horses, penguins, sea lions, rays, octopuses, lobsters, and harmless sharks. The tour costs \$100 and includes water and light food. In total, I spent \$1300 in 10 days, nowadays could be around \$1500.

*These prices were valid 10 years ago. Now, upon consultation, most prices have raised (and updated herein) but you can only take them as an approximate idea. Ask better first to confirm.

