



G A L A P A G O S

# BIG 15

M E T R O P O L I T A N T O U R I N G







**Galapagos BIG15**

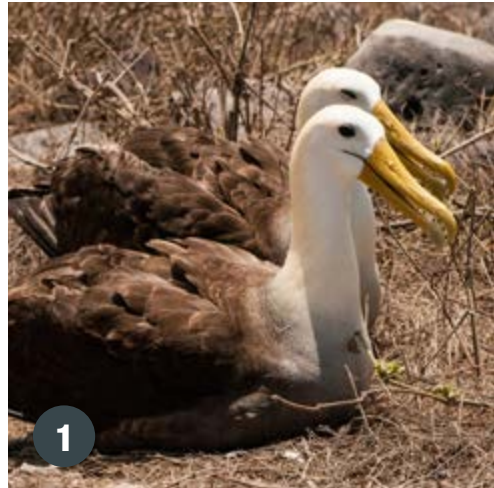
# THE GALAPAGOS BIG15

*It's quite simple: The more iconic species you see in the Galapagos Islands, the more rewarding and memorable your experience will be!*

When it comes to wildlife, no place on Earth compares to the Galapagos Islands. Lumbering giant tortoises and curious sea lion pups cavorting amidst dramatic volcanic landscapes let you feel what it was like before humans emerged on the planet. The vast diversity of animal life is what attracts visitors to this remote paradise, impressing explorers from all corners of the world.

However, the islands are far-flung, spread out over 53,282 mi<sup>2</sup> (138,000 km<sup>2</sup>), and this vastness presents quite a challenge when deciding where to go and what to observe in the archipelago. To tailor our itineraries and enable guests to absorb the best balance of Galapagos wildlife, we sought consensus among scholars, our Expedition Leaders and Naturalist Guides, and island connoisseurs, to choose the archipelago's most unique and fascinating wildlife. The list resulted in the Galapagos BIG15, which captures the most iconic wildlife of the archipelago. This is how explorers choose their ultimate voyage: Here, we reveal the key features and greatness of the Galapagos BIG15.



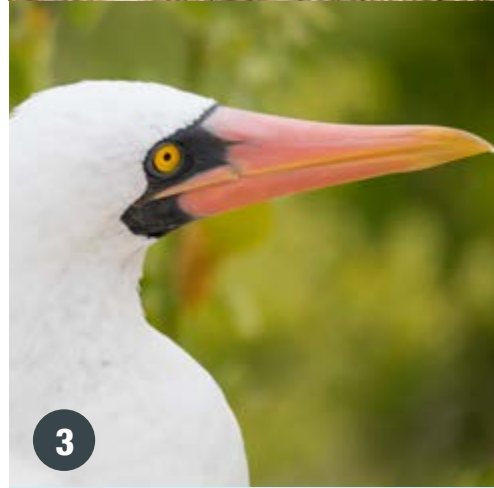


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G A L A P A G O S  
**BIG 15**  
METROPOLITAN TOURING



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- 1 Galapagos Albatross
- 2 Blue-footed Booby
- 3 Nazca Booby
- 4 Red-footed Booby
- 5 Flightless Cormorant
- 6 American Flamingo
- 7 Frigatebirds: Great and Magnificent



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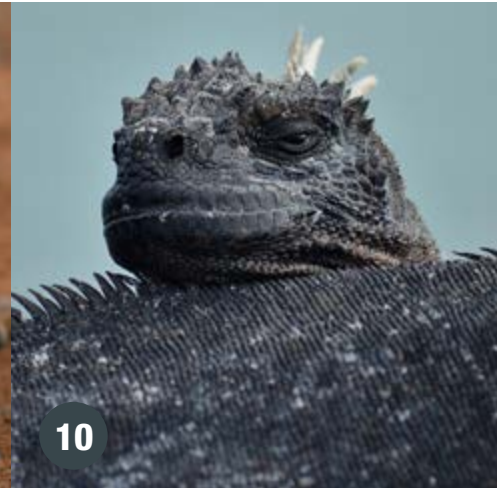
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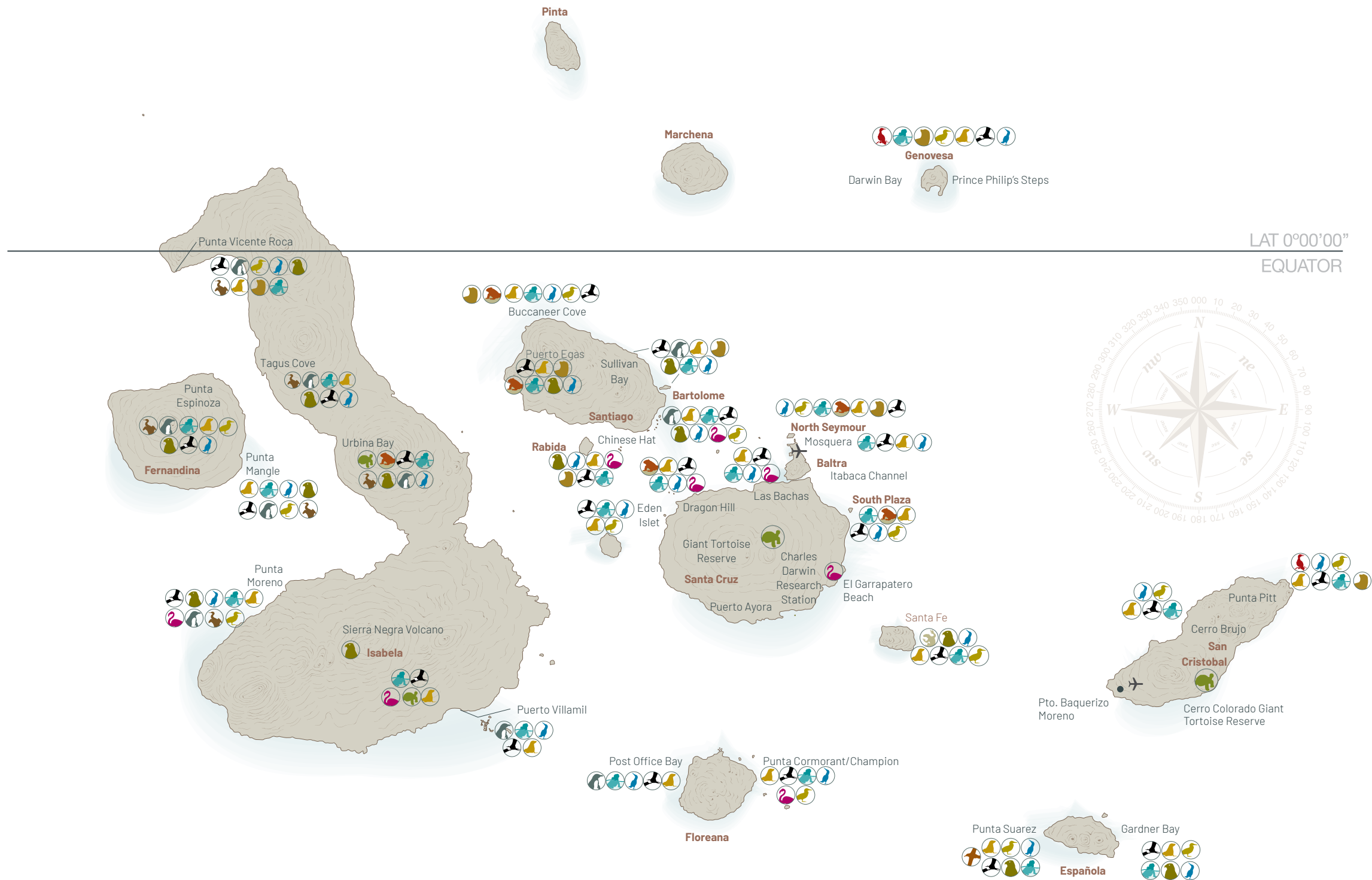
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# THIS IS YOUR GALAPAGOS BIG 15 CHECKLIST

- |   |   |   |
|---|---|---|
| <br>Galapagos Albatross                    | <br>Blue-Footed Booby    | <br>Nazca Booby                |
| <br>Red-Footed Booby                       | <br>Flightless Cormorant | <br>American Flamingo          |
| <br>Frigatebirds:<br>Great and Magnificent | <br>Galapagos Hawk       | <br>Land Iguana                |
| <br>Marine Iguana                        | <br>Santa Fe Iguana    | <br>Galapagos Penguin        |
| <br>Galapagos Sea Lion                   | <br>Galapagos Fur Seal | <br>Galapagos Giant Tortoise |





# GALAPAGOS ALBATROSS

The waved albatross, also known as the Galapagos albatross, is a sea bird endemic to Ecuador. The scientific name of the Galapagos albatross in Latin is *Phoebastria irrorata*. *Phoebastria* means foretelling, an idea that comes from the poem "The Rime of the Ancient Mariner," which mentions that these birds are good omens for sailors; and *irrorata* refers to the lattice design of the chest and back feathers. The first scientific description of this species was made by Salvin in 1883 based on a specimen that he found on the coast of Peru.

The Galapagos albatross is, by its size and its wingspan, the largest bird on the islands, but it is only medium-sized in relation to other species of albatross. Furthermore, it is the only species of albatross that lives in a tropical zone. This includes its nesting area as well its distribution area, which extends eastward from the Galapagos to the productive marine area right off the Ecuadorian and Peruvian coastline. Sightings have been recorded as far north as El Chocó in Colombia and Cocos Island in Costa Rica and as far south as the marine area of the Peru-Chile border.

Almost the entire population (99.9%) nests on Española Island, in the Galapagos Archipelago, and the other 0.1% nests on Isla de La Plata, just off the shores of Manabi, a province on the Ecuadorian coast. Galapagos albatrosses have an unusual take-off mechanism: they walk to the edge of cliffs and throw themselves at the sea below in order to gain speed for flight.

This bird, which has a yellow head, a white body, brown-black wings, and yellow feet, leaves its nest between November and January, and usually returns to its birthplace for the first time 4 to 7 years later. The adults, especially the males, reach Española Island at the end of March to copulate with other females until their mate arrives. The courtship process is very showy and features a colourful dance. Afterward, the female will lay an egg that weighs 9 oz (285 g). Male and female will take turns caring for the egg, and once born, the newborn chick will grow and live for around 40 years.

This unusual Galapagos BIG15 species can be seen on itineraries that visit the south-eastern Galapagos island of Española between March and December. **\*Scientific contributor:** Gustavo Jiménez-Uzcátegui, DMV. Scientist - Puerto Ayora, Galapagos, Ecuador



■ Present   ■ Likely to be Seen



GALAPAGOS ALBATROSS







# NAZCA BOOBY

Boobies have similar feeding strategies, but they tend to compete very harshly for nesting areas. This is particularly the case for the Nazca booby (*Sula granti*). Some scholars argue that the Nazca booby is a subspecies of the masked booby, although a 2002 study provides genetic evidence that the Nazca booby is indeed a separate species, diverging from the masked booby around 400,000 to 500,000 years ago.

Its most obvious difference in appearance from the masked booby is its shorter, flatter beak that is orange rather than yellow. It is the largest booby present in the Galapagos. Covered in snow-white plumage and sporting black feet, it is the most violently competitive Darwinist among them all.

Nazca boobies are bad neighbours, both to their own species, and to their cousins, the blue-footed boobies. These birds mainly nest along the shoreline, up to 300 ft (100 mt) inland on Genovesa. Hatchlings regularly commit siblicide, mostly by pushing the smaller brother or sister out of the nest, without the parents taking any action.

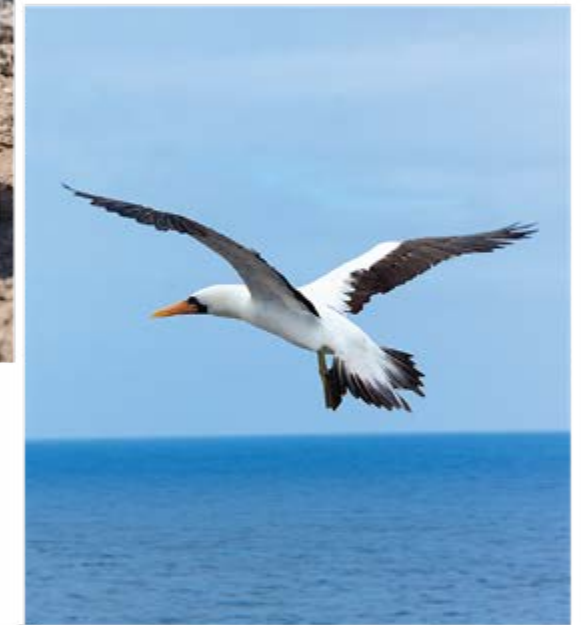
Female Nazca boobies do lay 2 eggs, 4 to 5 days apart, so that if the first is broken or eaten, the second may yet produce an offspring. When flying, they can be identified by the black wing and tail feathers. Despite the toughness of their competitive life, they are also listed as non-threatened – with a population estimated at around 30,000 – but their global number is estimated to be declining.



NAZCA BOOBY



■ Present ● Likely to be Seen





■ Present ■ Likely to be Seen



**RED-FOOTED BOOBY**



**Limited Distribution Species:** found on Genovesa, Punta Pitt (the eastern tip of San Cristobal); small numbers breed on one of Floreana's satellite islets, and a minute number nest on North Seymour.

Ironically, the least-seen booby – the red-footed booby (*Sula sula*) – happens to be the most numerous on the archipelago. Red-footed boobies nest mainly on Genovesa Island, as well as on San Cristobal, but may occasionally be seen elsewhere in the archipelago. It makes perfect sense for them to live in the corners of the archipelago, as these boobies forage on the outskirts of Galapagos waters. They have a particular taste for flying fish, which they catch thanks to their ability to fly at high speeds.

Individuals among this smallest Galapagos booby species reach up to 30 inch (77 cm) in length, with a wingspan of up to 57 in (154

cm). Its beak is light blue, turning to pink around the mouth and above the eyes, and its feet are characteristically red, with white claws. Adults have feathers varying from white to brown tones. At the same time, hatchlings look much like the Nazca boobies, all in white with black beaks.

Unlike most other booby species, they generally build their simple nests in low-lying branches of trees or bushes. To do this, they have longer toes than other boobies, allowing them to grasp and hold on to twigs and branches. They lay only 1 egg. If it is lost, females may lay another within 10 to 40 days. Besides the Galapagos, a vast area of the Pacific Ocean, including Midway Island and Easter Island, serves as home to red-footed boobies.

The best itineraries to view red-footed boobies are those that include Darwin Bay on Genovesa and Punta Pitt on San Cristobal.





# FLIGHTLESS (GALAPAGOS) CORMORANT

**Limited Distribution Species:** Found only on Fernandina and the west coast of Isabela.

The Galapagos or flightless cormorant (*Phalacrocorax harrisi*) is the rarest, largest, and most unique cormorant in the world because it is the only marine bird – except for penguins – that has lost its ability to fly. This change occurred due partially to the absence of terrestrial predators, but primarily to its need to grow a larger body to dive. In general, it plunges to depths of around 33-45 ft (10-15 m), but can it go as deep as 260 ft (80 m) if necessary, such as during an El Niño year when food is scarcer.

Adaptations to its body to support its feeding habits also include its feathers, which resemble fur and – unlike those of most birds – aren't covered in oil, as well as its solid bones. The most unusual trait of these birds may be their mating system:

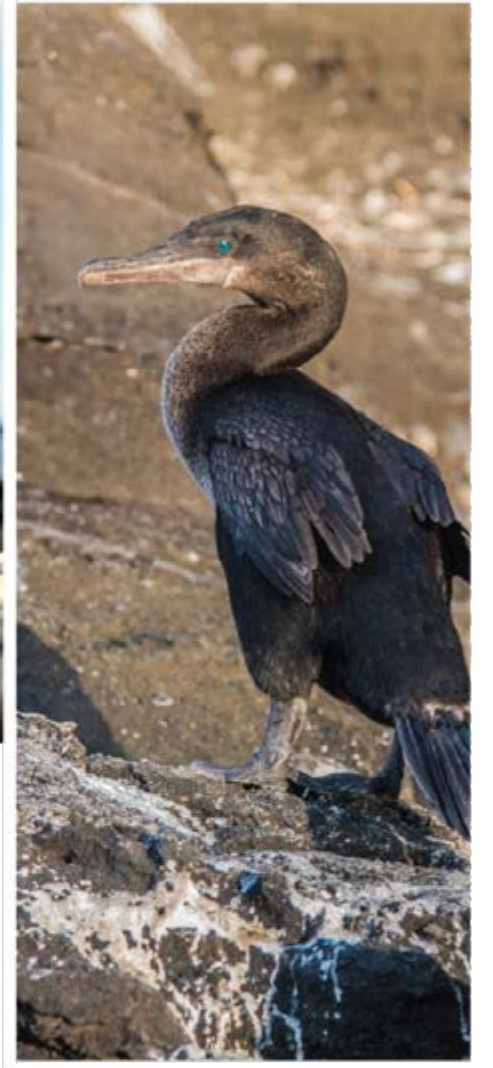
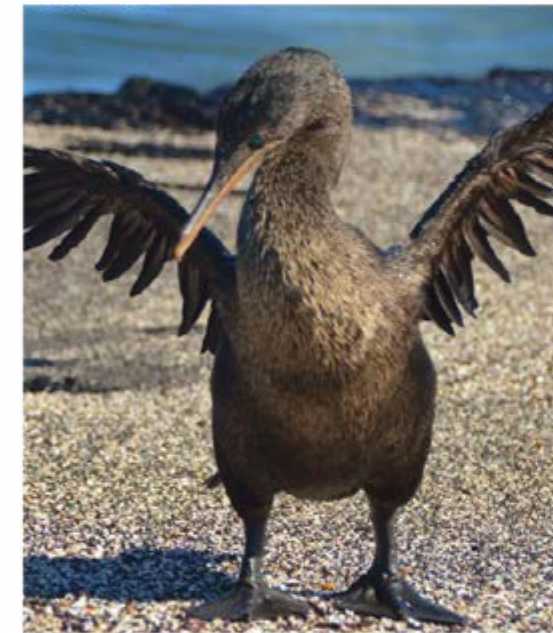
sex roles are partially reversed in *courtship* – *i.e.*, females lead and are more active than males in courtship and compete aggressively for access to males. The female normally deserts its mate and offspring to re-mate serially with different males while males raise the young unaided.

The flightless cormorant's ancestor reached the archipelago around two million years ago. Surprisingly, it probably arrived in the area even before the existence of Fernandina and Isabela, the islands where the species now lives. This bird probably evolved in the centre of the Galapagos before migrating west in tune with a major shift of high marine food productivity upon which it had come to rely. Due to their restricted range, flightless cormorants can be encountered only on voyages through the Western Islands.

**\*Scientific contributor:** Dr. Carlos Valle, Universidad San Francisco de Quito, Ecuador



■ Present ■ Likely to be Seen



 **FLIGHTLESS (GALAPAGOS) CORMORANT**





AMERICAN  
FLAMINGO



— Present ● Likely to be Seen



# AMERICAN (GALAPAGOS) FLAMINGO

The subpopulation of the American flamingo (also known as the Galapagos flamingo) in the Galapagos archipelago was first recorded in 1684 by Captain Cowley. A century-long debate about whether this flamingo is a native species or an endemic subspecies of the islands has still not been solved. The entire, highly vulnerable population consists of 500 individuals, which nest in the brackish lagoons of the islands: 70% are found in the Quinta Playa Lagoon of Isabela Island, and 30% are distributed throughout lagoons on the islands of Isabela, Floreana, and Santa Cruz, as well as on Bainbridge Islet. Nesting behavior was observed on Rabida Island until 1997 but stopped after heavy El Niño rains altered the lagoon.

The scientific name of the flamingo is *Phoenicopterus ruber*. Both parts of the name refer to the bird's unusual red colour, which stems primarily from its carotene-rich diet, transformed in its liver and deposited in its feathers. Its preferred foods are a crustacean, *Artemia salina*, and an insect, *Trichocorixa reticulata*, both of which are present in the lagoons. Flamingos spend almost

80% of their day feeding, sleeping for 10% of the day and using the remaining 10% for preening.

The Galapagos flamingo differs in size between sexes. The male flamingo is larger than the female, while the adult is redder or pinker than the young. The first nesting occurs at the age of 5, usually in the month of July, when an egg is laid that is cared for by both parents. A chick will be born from this egg after a 50-day period. The materials used to build the nest depend on the site where it will be built, but usually consist of mud, sand and gravel. The males and females participate in the building of the nest and usually spend the greatest amount of time working on it in the morning, from 6:00 a.m. to 10:00 a.m.

We have the opportunity to view this rare bird on numerous cruise itineraries and on select Finch Bay Galapagos Hotel programs.

**\*Scientific contributor:** Gustavo Jiménez-Uzcátegui, DMV  
Scientist Puerto Ayora, Galapagos, Ecuador

# FRIGATEBIRDS: GREAT AND MAGNIFICENT

Unusually, the great (*Fregata minor*) and the magnificent (*Fregata magnificens*) frigatebirds, two closely related species, coexist side by side in Galapagos. There are very few places in the world where animals that fit such similar slots in the overall food chain are able to survive simultaneously. While they have a wide distribution through tropical oceans, there is nowhere one can approach them more closely than on the Galapagos.

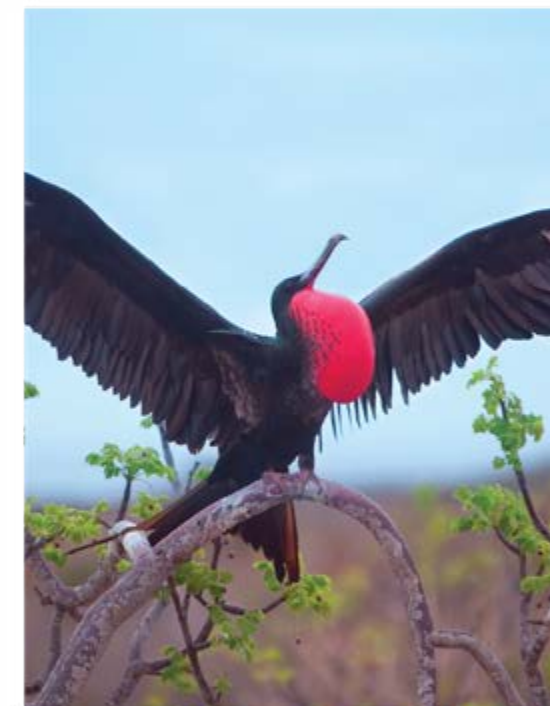
The magnificent is more pelagic, foraging for fish out at sea for long periods of time, while the great is more coastal. They both catch most of their food while in flight, sometimes robbing other seabirds, which has earned them the nickname of “Pirates of the Sky.”

In their larger colonies, both species nest near each other. Males’ impressive red guller sacks – which inflate to bright red heart-shaped balloons – are among the most eye-catching features of Galapagos breeding colonies. It takes around half

an hour for the sacks to inflate fully. While our guides will help you distinguish between the two species, great frigate males inflate a slightly shorter guller sack, but of a warmer red colour. Additionally, male great frigates have a green sheen on their shoulder plumage, while magnificent males have a purple sheen.

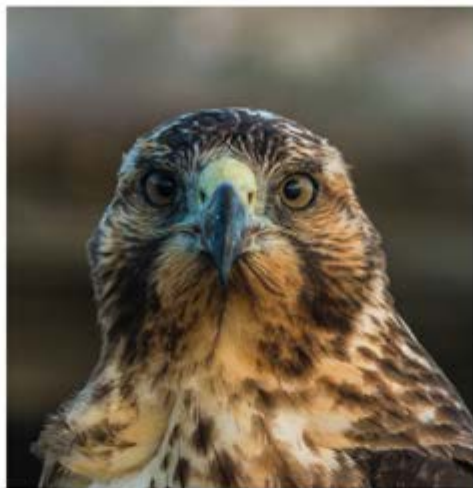
The easiest to tell apart are juveniles and females: magnificent frigate females have a black triangle of feathers running down from the base of the chin to the centre of their white chests. As a result, a white “M” is visible from below. Great frigate females have white all the way up their chins. Juvenile magnificent frigates have a white head, while great frigate juveniles have a rusty tone.

Frigatebirds in flight can be seen on all Galapagos itineraries. Top places to see their nesting colonies include San Cristobal, Española, and Genovesa Islands.



**FRIGATEBIRDS:  
GREAT AND  
MAGNIFICENT**





## GALAPAGOS HAWK



■ Present ● Likely to be Seen



# GALAPAGOS HAWK

Outside the Galapagos, the animal on top of the food chain is a large carnivore like the jaguar in South America or the polar bear in the Arctic. In the archipelago, this distinction belongs to the Galapagos hawk (*Buteo galapagoensis*), a handsome endemic bird of prey. As the apex predator, it has no natural enemies, but is classified as vulnerable by the IUCN. Genetic investigation indicates that it is among the most recent native arrivals to the islands, having reached them around 300,000 years ago, compared to the famous finches, which arrived 2 to 3 million years ago.

They are present on most islands, but uncommon, with perhaps 150 breeding pairs. While they are unafraid of humans, people are responsible for having caused their extinction on Santa Cruz, Floreana, Southern Isabela, and San Cristobal by introducing rival predators and through outright hunting.

They are also absent on Genovesa, but this natural exclusion seems to be linked to the fact that Genovesa has no lava lizards, the “key food species” of Galapagos hawks. They also prey on young land and marine iguanas, hatchlings of tortoises and sea turtles, as well as insects like locusts and centipedes. They may hunt in groups of up to three hawks and sometimes feed on carrion.

Females are larger and more powerful than males. Their family units often include one female with various males. Females tend to live on the coast and are highly territorial. For the young, this means that once they fledge, they have no choice but to migrate to the higher elevations.

The best itineraries for observing Galapagos hawks in their natural territories are those including Fernandina, Española, Rabida and Santa Fe.



In Galapagos, land iguanas play an important role as endemic resident herbivores. Their largely vegetarian feeding habits are responsible for the dispersal of several succulent plants. The Galapagos land iguana (*Conolophus subcristatus*) lives on several islands, making it the most widely distributed land iguana of the three species present in Galapagos. The biggest adults can weigh 30 lb (13 kg).

Nesting periods vary from island to island, and females bury 2 to 20 eggs in burrows. Rare hybrids of land and marine iguanas are known to exist on little South Plaza Island, and both species can be seen there side-by-side.

Land iguanas feed mainly on plants (mostly cacti and other succulents, so they can survive long periods of time without the need to drink water), but may also feed on anything else available, including carrion. To remove the small and annoying spines of prickly pears (cactus fruit), land iguanas have been seen rolling them repeatedly over sand and stones before eating them.

These reptiles have a life expectancy of about 50 to 60 years. Invasive mammals have taken a strong toll on these iguanas, with rats attacking eggs, feral cats eating the young, and feral dogs the adults. Feral donkeys and goats compete with them for food.

The National Park's programs to eradicate introduced species have helped the iguanas recover, allowing Galapagos land iguanas to be reintroduced on islands like Baltra where they had become extinct. Their current population is estimated between 5,000 and 10,000 animals. During the hot season (December-May) their courtship behaviour is quite amazing to observe, with aggressive chasing, territorial displays, and the development of bright brown and yellow coloration in their skin.

The best chance of finding land iguanas is on itineraries including Urbina Bay on Isabela Island, South Plaza, and Dragon Hill on Santa Cruz Island.



**LAND IGUANA** 





■ Present   ● Likely to be Seen



## MARINE IGUANA



# MARINE IGUANA

The marine iguana (*Amblyrhynchus cristatus*) is one of the most amazing Galapagos species. Few species show such astonishing adaptations and evolutionary changes as these lizards, dubbed “imps of darkness” by Charles Darwin. They arrived as terrestrial iguanas, and then evolved into their marine status before spreading throughout the archipelago. Their marine adaptations are a unique showcase of evolutionary biology. They are found on all Galapagos Islands – but nowhere else in the world.

Their critical adaptations to a marine habitat include a reduced heartbeat and constriction of blood vessels near their skin to avoid temperature and oxygen loss when exposed to colder ocean currents. A shortened snout with small tricuspid teeth allows them to graze on the narrow algae they forage at low tide either submersed – especially in the case of larger iguanas – or those exposed by low tide – favoured by smaller iguanas. Marine iguanas also have a

supersized supraorbital gland, which acts like a kidney to extract excess salt from their blood flow, allowing them to sneeze it out several times in a day. Marine birds also have a well-developed version of this gland.

The marine iguana's life span, believed to be around 40 years, is shorter than that of land iguanas. All our guests see marine iguanas, as they inhabit all islands, but they vary significantly from island to island.

Guests who visit Genovesa Island (all three vessels) will see the smallest and blackest marine iguanas (*nanus* subspecies); guests visiting Fernandina and Northern Isabela will see the largest marine iguanas (*cristatus* subspecies); and those visitors and those visitors landing on Floreana and Española will see the most colourful subspecies (*venutissimus* subspecies).



# SANTA FE LAND IGUANA

**Island Exclusive Species:** occurs only on Santa Fe Island

The Santa Fe land iguana (*Conolophus pallidus*) distinguishes itself with a camel-toned skin color, smaller dorsal spines and a more tapered snout than its other terrestrial counterparts. Its entire world population is limited in its habitat to tiny 9.3 mi<sup>2</sup> (24 km<sup>2</sup>) Santa Fe Island, east of Santa Cruz Island.

In comparison, its close cousin, the Galapagos land iguana, can be found on 5 of the 19 islands of the archipelago, including some of the larger islands. This distribution issue contributes significantly to the vulnerability of this rare species.

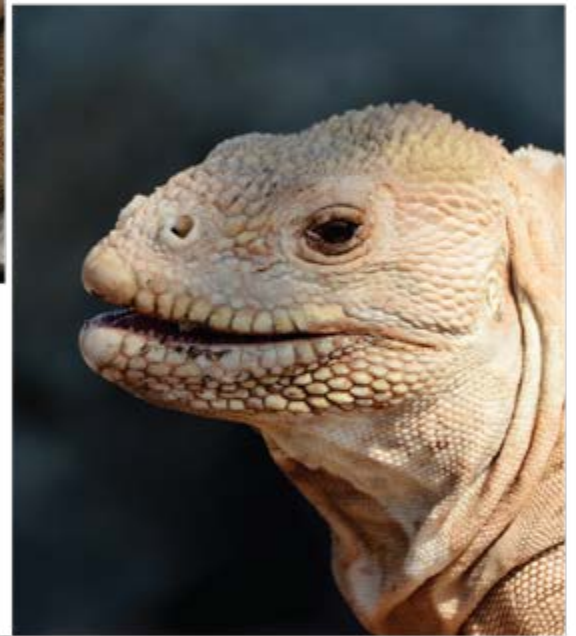
The Santa Fe land iguana weighs up to 25 lb (11 kg). Beyond their plant diet, which consists overwhelmingly of the pads of the island's prickly-pear cactus, some individuals have been discovered to eat insects and carrion. Darwin's finches sometimes feed off the bothersome parasites that can affect these reptiles.

The eradication of feral goats in 1971 has helped the species to survive, along with the endemic Santa Fe rice rat (*Oryzomys bauri*), one of the very few native land mammals (rodents and bats) present on the islands. The 3-11 eggs that females lay take about 50 days to hatch in their burrows.

Make sure that your trip to Santa Fe Island includes a guided hike in order to meet this unique reptile.




**SANTA FE  
LAND IGUANA**





## GALAPAGOS PENGUIN



Galapagos penguins (*Spheniscus mendiculus*) are the only penguins that live on the equator and the only penguins that moult twice a year. Of the 18 species of penguins known in the world, they are the rarest. The Galapagos penguin is the second-smallest penguin and weighs about 4.4 lb (2 kg). It is the only species of penguin that has no set breeding season. As a result, it can lay eggs up to 3 times in a year and, when food is abundant, can raise 2 chicks in about 3 months. Males, generally larger and heavier than females, have thicker bills.

These penguins can survive on the equator because their breeding biology is adapted to the unpredictable upwelling of productive, nutrient-rich water in the Galapagos archipelago. During breeding season, they shed their feathers around their eyes and bill allowing them to lose

heat. They stand with their feet in the shade to avoid the hot black lava. Penguins have no sweat glands, so when they get hot, they pant to keep cool or jump into the water. They seek shade to lay their eggs and raise their chicks. Lava tubes and crevices just above the highest tides make good nesting sites.

The current population is less than half of what it was in the early 1970s, with somewhere between 1,500 and 4,700 individuals observed today. The population of Galapagos penguins has not recovered because of several severe El Niños in the 1980s and 1990s and because of whalers' introduction of predators like rats and cats to the islands.

**\* Scientific contributor:** Prof. Dr. Dee Boersma, University of Washington, USA





# GALAPAGOS SEA LION

The Galapagos sea lion (*Zalophus wollebaeki*) is a particularly interesting seal (pinniped) species since it lives right on the equator, exposed to greater heat and potentially less food than colder-climate species. The productivity of the Galapagos, as well as the sea lion's adaptations, allow it to thrive nonetheless. This is the smallest species of sea lion, with females weighing around 165 lb (75 kg) and males up to about 440 lb (200 kg). Its ancestor apparently reached the archipelago around 1.2 million years ago, and the species currently numbers around 20,000 individuals. El Niño events impact their population by reducing the sea lions' food supply. The species is distributed throughout the archipelago, most densely in the central islands. Given that it is an endemic species in a small area, however, it is listed as endangered.

Excellent divers, Galapagos sea lions can descend up to 1,900 ft (580 m), although they mostly look for food in the top 330 ft (100 m) below the waterline, day or night.

Visitors may see Galapagos sea lion pups during most of the year. Most births occur between October and November, but on South Plaza, breeding season extends from July through April. During this time, dominant males defend their territories – and harems – along the shore, living off their fat reserves, while smaller males may try to sneak in and find a mate.

After giving birth, mothers stay with their pups for 5 to 7 days, later alternating between 1 to 4 days of hunting in the ocean and 1 day of suckling ashore. The length of time pups stay with their mother varies considerably: on Fernandina, they become independent after just 1 year, while this takes 2 to 3 years in the central islands. They are seen on all of our cruise itineraries and by guests staying at the Finch Bay Galapagos Hotel.

\* **Scientific contributor:** Prof. Emeritus Fritz Trillmich, Universität Bielefeld, Germany



## GALAPAGOS SEA LION





■ Present ■ Likely to be Seen



## GALAPAGOS FUR SEAL



## GALAPAGOS FUR SEAL

The Galapagos fur seal (*Arctocephalus galapagoensis*) is the world's smallest seal (pinniped), with females weighing just around 66 lb (30 kg) and males around 176 lb (80 kg). It appears to have arrived in the archipelago relatively recently and is more similar to its mainland relative (South American fur seal) than the Galapagos sea lion is to its continental ancestor, the California sea lion. The population currently numbers around 15,000 individuals but can be highly susceptible to El Niño events, during which many young risk starving due to smaller food supplies.

Galapagos fur seals live mostly on Fernandina and the western side of Isabela, but can often be seen in other parts of the Galapagos, notably Puerto Egas, North Seymour, and Genovesa. Solitary males can occasionally be found all over the archipelago. During breeding season, between September and December, males defend their territories for

2 weeks to 1 month at a time, living off their fat reserves. After giving birth on land, mothers stay with their young for 5 to 7 days straight. Pups stay with their mothers for 2 to 3 years; should another youngster be born during that time, both compete sharply for food, and the younger one generally starves.

Galapagos fur seals tend to hunt well offshore at depths between 200 and 330 ft (60 and 100 m), seeking fish and squid that at night tend to rise to these depths from further below. The bright light of the moon can prevent this ascent, so that most fur seals tend to stay on land during nights close to full moon.

**\*Scientific contributor:** Prof. Emeritus Fritz Trillmich, Universität Bielefeld, Germany



The Galapagos giant tortoise (*Chelonoidis nigra*) is the largest living tortoise species. Weighing up to 550 lb (250 kg) and numbering perhaps 200,000 before humans discovered the islands, their huge size led 16th-century Spanish explorers to apply their Spanish name to the whole archipelago.

The islands' dominant plant eater, they play an important role as their habitats' top grazer. In the wild, these gentle giants slowly barrel their way through the plant cover.

The shape of their shells varies from island to island and, on Isabela, from volcano to volcano. Islands with a humid climate have larger tortoises with domed shells and shorter necks; a dry climate leads to somewhat smaller tortoises with "saddleback" shells and long necks. Growing slowly, they often live to be well over 100 years old.

Hunting by whalers and others took a steep toll on the giant tortoises and their numbers plunged, with 5 of 15 species now eradicated. Breeding programs, however, have led to a recovery, and Galapagos giant tortoises now number close to 20,000. Rats, feral cats and dogs still pose a threat to nests, attacking eggs and newly-hatched tortoises. Young tortoises are therefore kept in special protective confinement until they have grown large enough to be safely released into the wild.

Inside the Galapagos National Park, visitors can see them at Urbina Bay on the Western Islands itineraries; they can also be seen in their natural habitat in the highlands of Santa Cruz and also at breeding centres in Puerto Ayora, Puerto Villamil, and at Cerro Colorado.

Guests on all Metropolitan Touring cruise itineraries and at the Finch Bay Galapagos Hotel will have the pleasure of seeing these massive animals up close.



 **GALAPAGOS  
GIANT  
TORTOISE**



 Present  Likely to be Seen



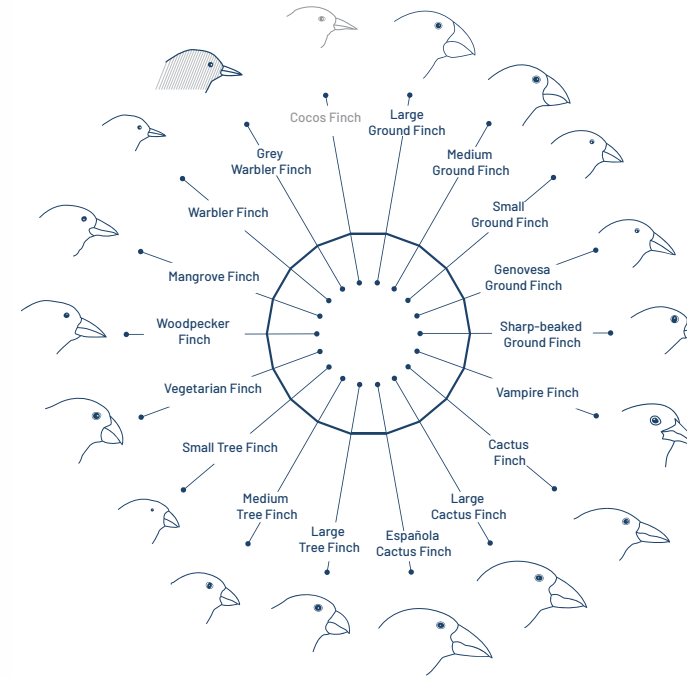
Inspiration doesn't stop with the **BIG15...**  
it abounds on all our itineraries.  
*Darwin's astonishing Finches showcase evolution in real time*



*Darwin Finch - Genovesa Island*



## DARWIN'S FINCHES



Thanks to Charles Darwin's travels through the Galapagos Islands, the curious finches now associated with his name are recognized as among the best showcases of natural selection anywhere. While Darwin's examples of natural selection in his masterpiece, *On the Origin of Species* (1859), include mockingbirds and giant tortoises, there's no doubt that the sparrow-sized birds also grabbed his attention. Because of his outstanding powers of observation, he noticed striking differences in features among these birds that quite obviously are related.

These varieties differ primarily in terms of beak sizes and feeding habits (see chart above). "Seeing this gradation and diversity of structure in one small, intimately related group of birds, one might really fancy that from an original paucity of birds in this archipelago, one species had been taken and modified for different ends," the British naturalist wrote in 1845.



When you notice the variation in the sizes of beaks, you are looking at natural selection in action. With some debate, 18 species are currently recognised, including the Cocos finch, which doesn't live on the Galapagos, but further north, on the Costa Rican Pacific island of Cocos.

The medium ground finch has even been observed evolving in "real time": When drought affected the islands in 1977, their preferred food, soft seeds, dwindled. Forced to switch to larger, harder seeds, within a few generations, their beak size grew by 10%! Genetic research continues to clarify more of the mysteries of Darwin finch evolution. In 2004, researchers discovered the bone protein that triggers their vast variety of beak forms. Exploring the islands with a seasoned team of naturalists allows you to train your own powers of observation, bringing out that Darwinian spirit needed for a rewarding understanding of the Galapagos.

# YOUR BEST VOYAGE OF DISCOVERY

**All our expedition options provide you with a safe, active, educational, and fun experience enhanced by the Galapagos BIG15.**

All islands in the Galapagos and their natural heritage are absolutely different. Some have labelled them as worlds within a world, and each world holds a surprising collection of unique and varied wildlife. Spread throughout the islands, the Galapagos BIG15 are experts' choices of animal highlights that guide you to the best way to experience the Galapagos.



Punta Suarez - Española Island



Giant Tortoise Reserve - Santa Cruz Island

Close to 1,000 km (620 mi) from the coast of South America, the islands are so far away that they were nearly inaccessible to animals from the mainland when they emerged from the Pacific Ocean. The area continues to show dynamic land formation patterns, with the oldest islands located in the east of the archipelago and the newest rising from the west. Eruptions, erosion, and physical changes have shaped the islands in incredible ways. Wildlife that gradually settled in certain locations adapted to ever-changing conditions, resulting in unique specialisations, thus limiting where they can be found. Our itineraries, focused on Galapagos BIG15 coverage, showcase the iconic wildlife that has evolved as a result of each unique island environment.



Glass-bottom boat

Our expedition options offer all kinds of highlights when it comes to thinking about which itinerary will give travellers their best experience in the archipelago. All of our programmes can be extended for up to a two-week voyage to be able to see each and every species of the Galapagos BIG15. Regardless of the itinerary length however, all these options will provide explorers with a safe, active, educational, and fun experience, including most of the Galapagos BIG15.

When picking your itinerary, keep in mind your particular interests, the time you have available for your journey, and which Galapagos BIG15 represents your favourite. All of the itineraries offer something special and the longer you stay, the more you can see.



*Punta Cormorant- Floreana Island*



Darwin Bay - Genovesa Island



*Punta Espinoza - Fernandina Island*

# CHOOSE WISELY

*TRAVEL SMART*  
Tips for a great Galapagos Journey

You've dreamt of it for a lifetime. The Galapagos Islands. A place where history has been made. For centuries, home to pirates and whalers, but mostly to highly unusual fauna, inspiration for Darwin's theory as presented in *On the Origin of Species*. And one of the few places on Earth where the wildlife shows no fear of humans, meaning you can observe it from just a few metres away. You want to see and do everything. But with so many options available in this magical, exhilarating, iconic destination, you know there will be some trade-offs. How to determine what works best for you? How to separate the essential from the merely beautiful? The transformative from the enticing? The perceptions from the realities...



*Bartolome Island*



Punta Mangle - Isabela Island

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WISELY**  
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## What is the best way for you to experience the archipelago's key wildlife and natural history?

All itineraries are not created equally. There are certain stops you must make if you want to go home with a clear picture of **why the archipelago is a top travel destination** and an inspiration to nature lovers and scientists from around the world.

**Certain key islands, like Genovesa, Española, Fernandina, North Seymour, and Bartolome,** offer a chance to transform our concept of nature, to see it clearly as a work-in-progress.

**Genovesa**, for example, due to its unique geological nature, was never connected to the rest of the Galapagos Plateau. Thus, only swimming or flying creatures could inhabit this small, yet impressive island known to many as the "Bird Island".

**Española**, is not only the oldest island, but also one of the most genetically isolated islands. Many of its inhabitants have the dual distinction of being both endemic to Galapagos and found exclusively on this island. This includes the largest marine bird in the tropical Pacific: the waved albatross.

**Fernandina**, is the archipelago's youngest and volcanically most active island. Many of its unique inhabitants became a recognisable species before this island was even formed. The entire island is a young, capricious volcano whose recent jet-black lava flows paint a stark picture of beginning land formation.

**North Seymour**, on the other hand, is the result of subsurface volcanism that has lifted the ocean floor enough to form an island. Although it is small, its location, shape and proximity to rich feeding grounds have made it a guides' favourite, not least of all because half of the BIG15 species make this island their home!

**Bartolome**, in the heart of the archipelago, combines jagged landscapes and intriguing wildlife. A short hike up to its summit rewards explorers with a panoramic view of the volcanic origins of these bewitching islands, while below, by the sandy beach, small colonies of Galapagos penguins – yes, penguins in the Tropics! – preen and dive at the base of the iconic Pinnacle Rock.

*Expert itinerary planning contemplates visits to the most iconic islands such as Genovesa, Española, Fernandina, North Seymour or Bartolome, ensuring that you make the most of your journey.*

## What does true exclusivity look like in Galapagos?

While on board the HMS Beagle, Charles Darwin witnessed the Galapagos in complete isolation and today's visitors want as similar an experience as possible: **an up-close-and-personal encounter with wildlife that shows no fear of human beings.**

If you're looking for true exclusivity in Galapagos, expedition vessels with a minimum of three guides on-board are, without a doubt, the best option. Due to park rules and careful itinerary planning, these vessels are alone at almost all the coveted visitor sites. In addition, they generally have on staff a knowledgeable and experienced expedition leader, who is better able to divide passengers into small groups and control the timing for their visit, allowing **each person to feel as if they have the island only to themselves.**

In short, expedition vessels with a minimum of three guides on-board can manage visits to the islands in a way that is not possible when numerous single-guided ships overwhelm the visitor site.

True exclusivity is the result of **carefully planned itineraries**, a minimum number of vessels at a particular site, and an experienced naturalist coordinating all activities on-board.



*Santiago & Bartolome Islands*

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TRAVEL SMART



**CHOOSE  
WISELY**  
TRAVEL SMART

*North Seymour Island*

## **What is the optimal number of guests per guide in Galapagos?**

Let's face it: If you come all the way to the Galapagos, you want to learn everything you can about the islands and their amazing wildlife in the time you have available. This means that you want your Naturalist guide to provide as much personal attention as possible, in your language, and at your pace. It also means that when you go ashore to the National Park's visitor sites, you want to feel as close to alone on the islands as possible.

The National Park Authority, which regulates the way people visit the islands of the archipelago, has established a rule that allows operators to go ashore with a maximum of 16 visitors per guide, and this is the number used by most single-guided ships for their groups.

On expedition vessels with a minimum of three guides on-board, however, there are more guides available, bringing average group sizes down to approximately 12 guests per guide, and never going above the Park's limit. Better still, **having numerous guides on board allows expedition leaders on multi-guided vessels to cater to various languages and create homogenous groups with similar interests and preferred paces**, making your trip that much more special.

**Having smaller group sizes** allows Naturalist guides to offer top environmental interpretation and enhances the intrinsic value of the islands' biodiversity.

## How can I be sure I will get along with my fellow passengers?

Sure, sometimes the famous “six degrees of separation rule” applies and you might just meet up with your long-lost cousin in the archipelago, but there is no guarantee that all your fellow passengers on a Galapagos cruise will share your interests, your language, and your taste for silence or conversation.

On single-guided ships, guests have little choice but to find a way to align their interests as they will be sharing reasonably close public quarters with other travelers. That is why **seasoned explorers**, the ones who have had the privilege of experiencing first-hand the most stunning destinations in our planet, often prefer expedition vessels with a **minimum of three guides**, where they can choose the amount of interaction with other guests, at their own pace and on their own terms.

Expedition vessels generally offer **more public areas**, a larger number of guests who might share your interests, and a greater choice of potential partners for conversations over dinner, if that’s what you want.



Galapagos Islands - Ecuador

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*Doctor on board*

**CHOOSE  
WISELY**  
TRAVEL SMART

## **Why is it important to have a doctor on board your Galapagos cruise vessel?**

The incredible hotel service and superb accommodations on board many Galapagos cruise ships can make us forget about how incredibly far visitors actually are from the mainland and quality emergency medical care.

Thankfully, most of the people who visit the archipelago are in good health and good shape and their dream journeys end up being just that: dream journeys. But what if you or a fellow passenger have a serious health issue? Or if a migraine, a stomachache, a sprain or a scrape threatens to ruin your day?

Most Galapagos guides and crew have basic first aid training. And although there are two hospitals in the islands on Santa Cruz and San Cristobal, **Galapagos cruises traverse the entire archipelago** and these options may be far away at the time events occur. That's why it's a relief to know that some vessels have a **Medical Officer (M.D.) on board** to take care of these situations right on the spot, making sure that you and your loved ones are in good hands.

All operators watch out for their guests on the islands, but having a **medical doctor on board takes guest safety to another level.**

## What is the guest-space ratio and why is a relatively high one important on your Galapagos cruise?

The cruising industry realized long ago that not all ships are created equal. The **guest-space ratio** (GSR), comprised of the ship's gross tonnage divided by the total guest capacity, provides a benchmark that allows guests to compare the amount of **space available for each guest** to find their own comfort zone on any ship, anywhere in the world. The GSR on single-guided boats tends to be around 14, significantly lower than the average 28 GSR of expedition vessels and yachts.

A GSR of 40 might well be too large for optimal expedition operations in the archipelago. A GSR of around 30 is ideal, since it ensures comfort for everyone (including the crew) and ensures less environmental impact (due to the space on board for waste water treatment, for example). Put in other words, you might not always want to go to your cabin if you are looking to be alone.

Ask for detailed information about your ship's facilities and where you can go, besides your cabin, when you want some extra room. A high guest-space ratio means you will be able to find your own space... to exercise, to read, to relax and watch the view go by.



Expedition Room



Punta Pitt - San Cristóbal Island

**CHOOSE  
WISELY**  
TRAVEL SMART

## **Will having multiple guides on my Galapagos adventure make a difference?**

Absolutely! The Galapagos National Park is not your normal vacation destination. It is a living laboratory of evolution and scientific discovery as well as a place where the wildlife runs free with absolutely no fear of humans. To keep it this way, and to make sure that tourism is contributing to its preservation rather than its destruction, the National Park has set up strict rules that regulate how visitors can explore the archipelago. One of the key regulations states that guests are not allowed to perform any activities at land **or aquatic visitor sites without accompaniment from a trained and licensed Naturalist guide.**

At a practical level, this means that if guests on your ship have different interests or want to pursue **varied activities** (some want to snorkel, for example, while others want to kayak) they can do only as many things as there are guides. So, if your ship has at multiple guides on board, you have far less downtime and far greater opportunities to do what you came to do. If your ship has only one guide, you will necessarily be forced to do the same thing as all of your fellow shipmates.

**At least three guides on board increase flexibility and offer all guests greater activity options.**

## **How can I be sure my journey to the Galapagos will have a positive impact?**

Travel should be a force for good, contributing to the long-term sustainability of a destination while also helping local people to be part of its extensive value chain – whether directly or indirectly – ensuring their well-being. We all want to feel we are creating a positive impact for both communities and the environment when we travel.

Since the travel industry is a contributor to climate change in the form of carbon emissions from transportation (above all), it's key to know what an operator is doing to mitigate the carbon emissions produced by your trip, and how exactly their program works. Not all carbon offsetting schemes are created equal. You want to know that a company is a) measuring its carbon emissions correctly and comprehensively, b) that its program to offset them is transparent and traceable and c) that the program they have benefits the destination you are visiting in a direct and substantial way.

Other environmental aspects to enquire about include a company's procurement policies – local is always best, both for local economies and for lessening carbon emissions – as well as its waste management and energy management policies and processes. Knowing a company is doing its utmost to lessen its impact on the environment means you can feel better about your purchasing choice.

How companies contribute to local communities is also fundamental. Do they employ local people in their operations? Do they have programs to educate local people to ensure they can access better employment opportunities in the future? Do they run programs that support conservation efforts in the destination? Do they contribute to their local societies by supporting grassroots organizations and initiatives?

Choosing your Galapagos operator wisely by asking these kinds of questions means you are actively contributing to the archipelago's long-term sustainability – so that generations to come will be able to enjoy the same pristine experience of nature as you.



*Tortoise Breeding Center - San Cristobal Island*

**CHOOSE  
WISELY**  
TRAVEL SMART



**BEYOND  
GALAPAGOS**



Esmeraldas beach



Chimborazo



Andean Choco

## ECUADOR

With its regions that span the Pacific Coast, Andes Mountains, and Amazon Basin, Ecuador is celebrated as one of the most biodiverse countries in the world. What makes it a special treat for travelers is the fact that, due to its relatively small territory, one can visit many different regions – with distinct ecosystems, cultural heritage, traditions and gastronomy – with relative ease.



Machu Picchu

## PERU

Regarded as one of South America's most exciting and varied nations, Peru offers the curious adventurer a bottomless wealth of possibilities, archeological marvels, exquisite gastronomy, inspiring art, and captivating communities. It is a country full of color and life with a mixture of unique cultures that reside in beautiful places where history and modernity coexist in complete harmony.



Cartagena

## COLOMBIA

Colombia is a country with so much to offer in terms of culture, nature, architecture, cuisine, art, dance, and music. As a country that has undergone a significant transformation and continues to evolve in new and exciting ways, Colombia is rediscovering its beauty and sharing it with travelers from all over the world.



Blue-footed Booby, Punta Moreno - Isabela Island

BIG15 V2025

G A L A P A G O S  
**BIG**  **15**  
M E T R O P O L I T A N T O U R I N G

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