

## Wildlife of the Galápagos Islands

This cluster of islands is a haven for wildlife, with iconic species of giant tortoise, iguana and so much more.

An open-air wildlife showcase Isolated for millions of years in the vastness of the Pacific, the iconic wildlife of Galápagos has evolved without any major predators. With scant freshwater supplies, even humans were dissuaded from staying too long, and as a result the islands' ecology retains much of its original integrity. Giant tortoises lumber through forests of cacti, while iguanas - adapted to marine life - slip from the black volcanic rocks into the sea in search of food. Life thrives here.

## **Evolution in action**

Charles Darwin's 1835 visit to Galápagos was key to our understanding of evolution and natural selection. Today, the islands are arguably in a better state than when he visited, with strict conservation laws and breeding programmes in

place. Many of the most noteworthy animals can be easily seen, from Galápagos sea lions and fur seals, to Albatross, penguins and three types of booby.

The biodiversity within the UNESCO World Heritage Galápagos Marine Reserve is extraordinary, and we aim to keep it that way by closely following wildlife protection guidelines.







The beak that inspired a book - Darwin noticed that of the 18 species of finch he encountered in the Galápagos, each had a different type of beak. He theorised they must all have descended from a common finch found in South America, and their beaks had adapted to eating different types of seeds on the diverse islands. Detailed drawings were made, and exact measurements taken. It became clear to Darwin that bigger beaks were for bigger seeds, and vice versa, inspiring his theory of natural selection.



## Adapting to a watery world

- Marine iguanas have evolved adaptations allowing them to swim underwater and graze submersed vegetation, making them the only reptile anywhere in the world with this ability. To do this, their hearts beat more slowly than their terrestrial cousins and the blood vessels under the skin constrict. Their snouts have shortened, and small tricuspid teeth have developed to facilitate nibbling algae from rocks. Furthermore, they possess enlarged supraorbital glands to extract salt from their blood, which they then forcibly sneeze out.



Ol' blue feet - The most noticeable feature of sula nebouxii - commonly called the Blue-footed Booby is - yes it's blue feet. The colouration is due to carotenoid pigmentation caused by eating fresh fish. These pigments signal health and, in particular, the bird's immunological state and overall fertility - with a bright blue hue signifying excellent health. As such, the blueness of a booby's feet is a trait for sexual selection - which is why they exultantly wave their webbed feet in the air during courtship rituals.