Exhibition Hall

INTERNAL

**General info**

Welcome to the Charles Darwin Exhibition Hall

This is the suggested order to see the Exhibition Hall

NOTE: THIS IS ONLY FOR THE PERSON WHO GUIDES! NOT FOR THE VISITOR. THIS IS JUST THE SUGGESTED ORDER FOR THE GUIDED WALK:

* Go left from the main entrance - stand in front of the Bryde’s whale.
* Enter the Photo Gallery and take time to show the photos and talk about the donated images.
* Stop at the Darwin Mosaic and let visitors look at it, take in the detail, enjoy the view, and take pictures.
* Go around the whale bones explaining projects – panels to your left.
* CDF History, Flagship projects: Work to Rescue Threatened Species, Protecting the Mangrove Finch and Other Birds from Invasive Species, Landbird Conservation Program, and Brydes Whale
* Go to the Giant Tortoise Corner- Photo Opportunity or talk about the tortoises on the different islands next to the panel.
* Move along towards the donation point - stopping at the Galapagos Map, and explaining the other projects in the panels (Galapagos Verde and Invasive Plants)that are located on the other side.
* Donation Point - explanation of how the donations help our work.
* Go back towards the theatre, stopping at the Ocean Mural and the touch table , and explain the Marine projects.
* Next, stop to see the video in the theatre.
* Lastly, stop inside of the Exhibition Hall Collections Room - Show visitors the microscope on the shelves, explain the importance of keeping collections for the Government of Ecuador. Take them to all the tables and displays.
* Ask the group if anyone needs a toilet.
* Continue to the Lookout, stopping at the “Charles Darwin Visit to Galapagos” map and the photo cutouts on the terrace to finish the visit. Explain at the lookout explain the different points – The view of the Town and the Mountains.
* VISIT COMPLETE

Here we would like to take the opportunity to show and tell you about the scientific work done at this research station, an organisation that has been working in the Galapagos for over 50 years. It was founded in 1959 and opened in 1964.

Explain about the flagship projects on which we are working currently:

* Mangrove finch recovery project
* Introduced fly *Philornis downsi,* Biological control project
* Shark tagging project
* Native Species Reforestation Project Galapagos Verde 2050
* Invasive species: Terrestrial and marine

**CDF:** International not for profit organization, its mission is to advise the Ecuadorian government to ensure the conservation of the islands.

**Short story**

**Foundation:**1959, created under the auspices of UNESCO and IUCN.

Agreement with the Government of Ecuador to operate a scientific research station in Galapagos. The Research Station was inaugurated in 1964.

**Current Number of Staff**: 56 staff and 17 volunteers.

**Nationalities:** Ecuadorian 90%. We also have staff from Columbia, Chile, Spain, the United States, Canada, England, France, Germany, Austria, New Zealand, and Australia. (11 countries in total)

If you want to volunteer or know someone who would like to, please visit our website. It is a unique experience!

**Whale**

 Type of whale: Bryde´s whale *(Balaenoptera edeni*)

**Short story:**

This is a medium-sized species of whale which is commonly found in the northern part of the archipelago, in Canal Bolivar, Fernandina and Isabela Island.

This was a young male found beached on Rabida island back in 1995.

The skeleton has a length of approximately 13 meters.

The tail begins at vertebrae 42. One of its vertebrae is missing from the display because it is saved in our collections room in a building that is not accessible to the public (this information is only in case a person notices the missing vertebrae)

If this whale were alive its width would be about 3.90 meters.

The whale died and was washed onto shore. Godfrey Merlen, a naturalist from England that has lived in Galapagos for many, many years, took on the challenge of cleaning, and sorting the bones which were saved in our collections room for many years. You can still see the numbers on the vertebrae. Most of the bones were saved, but only the head bones and spine are on display. To display them all we would need a larger room!

These were kept on the grounds of the Research Station for more than 15 years until a permanent place was found to display them.

It took more than 7 months for the whale to be cleaned and transported to Puerto Ayora. It was a strenuous task, and a heavy one too! It took 5 men to carry the head and jaw bone of this whale.

One of the mandibular bones was cut, presumably by fishermen to use as fishing bait.

**Amazing Galapagos**

**Professional photographers who donated their photos for the Exhibition Hall**

* Name of Photographers: Tui De Roy, Enric Sala, Octavio Aburto, Pelayo Salinas, Jonathan Green, Ivan Carmigniani, Carlyn Iverson.

**A local perspective**

* Local amateur photography Club who works on projects every few months. We are supporting local students to show their photographs in the Hall.

Charles Darwin

This Foundation has the name of Charles Darwin not only because we continue working on science and education in this living laboratory that is Galapagos, but also because, it was on these islands where his thoughts gave shape to a new way of thinking about the universe and its creatures. Today we continue seeing evolution in action.

Charles Darwin spent only 5 weeks in the archipelago; visiting only 4 islands (San Cristobal, Floreana, Santiago, and Isabela) in an amazing 5-year trip on board of HMV Beagle around the globe.

If by any chance you have felt sick during your boat trip, think about this poor chap, who felt sick every day of his journey.

**Tortoises**

One of the first and most important projects of the CDF was the breeding of giant tortoises whose populations had been decimated by introduced mammals that either prey on young tortoises (dogs, cats, rats) or compete for the food of tortoises or destroy their habitat (donkeys or goats). For many years scientists, working in conjunction with the personnel of the National Park, collected and transported eggs of tortoises from different islands, kept them in special incubators and, then, when they hatched, took care of the babies until they were big enough to fend for themselves. Huge efforts have also been put into eliminating introduced mammals from these islands to ensure that tortoises can thrive. ..

On Pinta, Rábida, Santa Fe, and Floreana islands the tortoise populations have gone extinct. Many populations suffered and possibly disappeared due to the actions of whalers who took tortoises aboard their ships in order to have fresh meat during their long travels. The Galápagos tortoises can survive without food or water for more than a year, and it was for this reason they were hunted by the whalers who lived in times before refrigeration.

On the islands of Española, Pinzón, and Santiago, programs to eradicate wild pigs, goats, and rats have been successful. On these islands the tortoise populations have been restored.

This program was run by the FCD for many years, In 2010At the beginning of 2000 the CDF passed on the program to the Galapagos National Park who continue running it to this day.

The shells in the Exhibition Hall are from the *C. porteri* sub-species. They came from Santa Cruz Island.

Males can weigh more than 500 pounds and females average 250 pounds. (when you see one in the wild or up in the highlands, please do not sit on them, they already bear a heavy weight)

Just the shell can comprise of up to 20% of the tortoises’ weight.

There are two different types of tortoises found in the archipelago:

Large tortoises, with big round shells called domes. This rounded shell allows them to go through low vegetation easily. These tortoises are found on the larger islands that have humid highlands and a wide range of plant species.

Smaller tortoises with shells that curl up in front, which enables them to stretch their necks to reach branches and cactus pads. This shell looks like a saddle; so they are called saddlebacks. These tortoises are found on the smaller, more arid islands.

The only natural predator of the Galápagos tortoise is the Galápagos hawk. The hawk preys on the newly hatched tortoises.

**Life span:**

Unknown in the wild, but one tortoise is known to have lived till 171 years old in captivity (San Diego Zoo)

**Number of eggs laid:**

2 to 16, depending on subspecies

At the moment you can find 11different tortoise sub-species on 7 islands.

Incubators are made of wood with a hair dryer and thermostat. Higher temperatures cause the embryo to become female, and lower temperatures produce males.

**Lonesome George**

Lonesome George died on June 24, 2012.

Lonesome George was found on Pinta Island. He was the one and only of his species; the Pinta tortoise (Chelonoidis abingdoni). He was brought to the CDF in 1971, with hopes of finding a Pinta female in zoos around the world.

Within a short time, the discovery of a Pinta tortoise was big news. The American media began to refer to the tortoise as Lonesome George – after George Gobel, a TV comedian, who had become known himself as Lonesome George. The name stuck.

There were many efforts made for him to reproduce with females from other islands without any luck.

 It is estimated that he was 100 years old at the time of his death.

**Matazarno**

This native hard wood tree was widely used by the first settlers to build houses and furniture. Is quite hard and heavy, resistant to termite damage and rot. Today it is a protected species.

**Charles Darwin**

Arrived on board the HMV Beagle as a companion for the captain Fitzroy. With a passion for geology and an avid collector, CD used this 5 year voyage to make some interesting observations. The Beagle stopped in Galapagos for 5 weeks. During this time CD increased his collections and made some observations that helped him formulate the theory of evolution. 20 years later he published the book on Natural selection…. Which revolutionized the science of the times and shaped the evolution science of today.

While it is true that Darwin observed finches during his visit to the Galapagos, the birds that truly inspired his theory on natural selection were the mockingbirds.

Observation

Have a closer look at our curiosity table, check out the textures, colours and shapes of some of the most commonly found items on the islands.

On the wall you can also see some of the tools used by our scientists in the field.

**Marine life**

**Sharks in the Galapagos Marine Reserve:** With ultrasound and satellite technology, along with visual surveys, we are documenting the migration patterns of shark species. We need to better understand their biology and their socioeconomic impact on the islands.

**Galapagos Seabirds:** Our monitoring efforts focus on the Galapagos penguin and flightless cormorant, both endemic species which are listed as threatened in the IUCN red list.

**Mantas in the Galapagos Marine Reserve**: This project focuses on answering the many questions we have on how manta rays use the marine reserve, for example, where are they found, are they migratory, etc.

**Marine Turtles in the Galapagos Marine Reserve:** The East Pacific Green Turtle nests in the archipelago and migrates throughout the Pacific Ocean. Working with the National Park, we are studying and documenting the population dynamics of these turtles.

**The donation point**

**The funds we receive from your donation help all our projects. Our work depends on generous donations.**

**THE REST OF THE VISIT TO THE RESEARCH STATION GROUNDS**

*La visita a la ECCD no termina con la Sala (la Sala puede ser visitada al inicio o al final de la visita a la ECCD). A través de nuestros jardines de plantas endémicas y nativas, donde merodean abundantes aves terrestres como pinzones, cucuves, canarios, cuclillos, entre otros, la visita nos lleva por varios interesantes y entretenidos puntos. Después de la Sala está la exhibición del proyecto de restauración Galápagos Verde 2050. Allí se aprecian paneles y ejemplos de la tecnología (una de ellas biodegradable) que está siendo probada para restauración ecológica de varias islas y apoyo a la mejora de cultivos de productos agrícolas, particularmente por las condiciones secas de las islas.*

*El recorrido continúa por el laboratorio de la mosca hematófaga Philornis, la plaga más amenazadora de Galápagos. Aquí los visitantes pueden ver a través de un vidrio a los investigadores manipular las cajas Petri, las trampas de moscas, y conocer a través de los paneles explicativos sobre la relevancia y esfuerzos por controlar biológicamente a esta amenaza para las aves terrestres de Galápagos. Todo esto gracias a la colaboración de más de 18 entidades nacionales y extranjeras de 8 países. De aquí se puede hacer una corta visita a la escultura de tamaño real de Charles Darwin, quien posa sentado en una amplia banquina bajo sombra como si estuviese esperando la llegada de acompañantes para platicarles un poco de su viaje alrededor del mundo. Paneles sobre los intereses de Darwin en la geología se exhiben muy cerca de donde él yace sentado.*

*El siguiente punto es el “cubo de sombra del Pinzón de Manglar”. Aquí se expone un video en inglés con subtítulos en español mostrando la investigación para salvar a la especie más amenazada de pinzones de Darwin debido a la predación de ratas pero más aún por la alta mortalidad causada por la mosca Philornis. Aquí el guía puede ampliar su explicación con las imágenes que enseñan todo el proceso desde la captura de nidos con pichones y huevos, su traslado en incubadoras especiales al laboratorio de la ECCD, el cuidado de los pichones y su alimentación cada hora de hasta 15 veces diarias, el cuidado de los volantones, y su traslado final a su sitio de origen.*

*De allí, la visita se dirige a los corrales de tortugas gigantes galápagos recientemente traídas del volcán Wolf de la Isla Isabela. Estos galápagos tienen un genoma con un porcentaje de más del 50% de aquel de la Isla Pinta de dónde provenía el Solitario Jorge. Allí están como parte del programa de reproducción que la DPNG ha iniciado para en unos 200 años obtener galápagos puros de la Isla Pinta y repoblar esa isla. Seguidamente está uno de los corrales más antiguos de galápagos, los de la Isla Española. Aquí los guías pueden interpretar el programa de crianza de galápagos que inició en los años 60, hablar de Diego, el semental donado por el Zoológico de San Diego, la eliminación de chivos en los años 70s, la reproducción natural, entre otros. Para finalizar el recorrido están los corrales de iguanas terrestres que ofrecen la oportunidad de hablar sobre el programa de crianza de iguanas terrestres que inició en 1978 y finalizó exitosamente en los 90s con la estabilización de poblaciones de Cerro Dragón, Baltra, y Bahía Cartago en Isabela.*

*La visita a la ECCD es un complemento a la visita futura al sendero que lleva al Centro de Crianza Fausto Llerena manejado por la Dirección del Parque Nacional Galápagos.*