

Charles Darwin

Charles Darwin was born on the 12th February 1809 in Shrewsbury. He was eventually to become the most famous naturalist there has ever been, but his career began almost by accident.

Darwin's father wanted him to become a doctor, so in 1825 when he was just 16, Charles was sent to Edinburgh University to begin his training. Unfortunately, he found the lectures boring and spent most of his time outside, walking in the country and studying the animals, plants and insects he found.

When he eventually finished his degree in 1831, a friend recommended him for the job of "official naturalist" on a ship called the HMS Beagle which would soon be departing on a voyage around the world.

The captain of the Beagle was a young Christian man called Robert Fitzroy. He didn't want a naturalist on board his ship who would contradict the Bible, but he knew that Charles had trained to be a clergyman and so thought he'd be ideal.

The Beagle sailed to South America. Charles explored, collected specimens and filled notebook after notebook with descriptions of the incredible animals and plants that he saw. On some of his expeditions he discovered the fossils of extinct creatures and wondered what could have happened to them. He had noticed that while the fossilised animals were similar to the living animals he'd seen, there were also important differences. Somehow, changes had taken place over time and he didn't understand how this could have happened.

Three and half years into the voyage, the Beagle arrived at a group of twelve volcanic islands, 500 miles off the coast of Ecuador. The islands were named after the giant tortoises that lived there, called *Galapago* in Spanish. The Beagle stayed at the Galapagos Islands for five weeks and Charles went ashore for only 17 days, but it was here that his revolutionary ideas began to take shape.

The islands were only a few miles from each other and the animal life on each one was very similar. But it was the *differences* that fascinated Charles. Eventually, it was the islands' birds that helped Charles to come up with his theory. He noticed that the finches from the different islands looked very similar apart from the shape of their beaks. His idea was that they had different shaped beaks because different food was available to them on different islands. On an island where a lot of nuts grew, birds with a beak that was a good shape for cracking nuts would get more food. They would be more

healthy, live longer and have more chicks who would inherit the same shaped beak. Over the generations, the birds with beaks of other shapes would die out because they couldn't crack as many nuts. This, thought Charles, must be what had happened to the extinct creatures whose fossils he had found. Only animals that were suited to their environment survived and the others died out. In this way they changed - or *evolved*. It was the beginning of Charles Darwin's theory of Natural Selection.

In 1836, the *Beagle* returned to England after a five year voyage. Charles continued his studies and began to publish his writings. He got married, had ten children - yes, *ten* children - and despite periods of illness, he continued to work on his theory of Natural Selection.

If Darwin's theories were true it meant that animals had evolved slowly over hundreds of thousands of years, with successful species thriving and unsuccessful species dying out. In this way, humans had evolved to suit the habitat; the habitat had not been made to suit humans.

Charles Darwin died April 19th 1882