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GREAT SCIENTISTS

CHARLES DARWIN (1809 — 1882)

MOST people today accept the idea that man evolved from the apes. Anthropologists have since produced evidence to support Charles Darwin's theory of evolution. But when Darwin first came out with the idea, he created a big controversy.

Religious men were indignant at the suggestion that man, who was so obviously different from monkeys, could have originally been ape-like. They believed that the story in the Bible about God creating Adam was literally true.

They also disliked his theory of natural selection, more popularly known as the survival of the fittest. It made the animal kingdom appear cold and completely heartless.

At the same time, Darwin also highlighted the importance of the environment in the survival of plants and animals. He can be called the founding father of ecology defined as the study of the relationships between all living things and the environment.

He was the scientist who changed dramatically the way man looked at himself and his surroundings. From that basic idea have come many of the explanations for the workings of nature.

Born at Shrewsbury, Shropshire in England, his grandfather was a poet, doctor and scientist while his mother was from the famous Wedgwood family well-known for their pottery.

As a young man, Darwin tried medical studies but the sight of an operation made him faint. He was then sent to Cambridge to study to be a clergyman. Instead, he spent more time in sports like shooting, hunting and riding.

But something good did come from his time in Cambridge. He became friends with John Stevens Henslow, a professor of botany who stirred his interest in natural history.

In 1831, Henslow got him the job of naturalist on the HMS Beagle which was doing a scientific survey of the coast of South America.

Darwin was away for five years on a journey that took him not only to South America but to Australia, New Zealand and South Africa.

Some of the important things he observed were the similarity of animals found in different countries. He also noticed that in the same place, there would be different types of the same animal. For example, in the Galapagos Islands off the South American west coast, he saw different types of turtles.

Darwin was also interested in plants. He applied his theory of evolution by natural selection — that the fitter of the species adapted to changes in the environment in order to survive — to plants as well.

Thus he experimented with plants to show that the different characteristics of plants helped them survive. The same rule applied to animals.

Darwin's travels affected his health. On one occasion he was severely bitten by bugs, causing him to suffer from stomach troubles, lack of energy and heart problems.

Despite his bad health, Darwin published many books explaining his ideas. The most famous is The Origin of the Species which explains evolution and natural selection. Another, The Descent of Man, traces man's ancestry to the apes.

Darwin suffered a second heart attack at the age of 73 and died in his home.

Next week: Gregor Mendel