Two Hundred Years of Charles Darwin
Discussing natural selection and the theory of evolution

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Transcript

[D. Stocum] February 12th is the 200th anniversary of the birth of Charles Darwin, who is most famous for his development of the theory of evolution. We might start by first giving a definition of evolution, which is that with the passage of time, the descendants of organisms will come to differ both morphologically and physiologically from their ancestors.

Two great contributions to the theory of evolution was one, to document that these morphological changes actually occurred over time, and he did this over a period of twenty years up until about 1859 when he published his theory in the book that he wrote on evolution, The Origin of Species.

Darwin did one other thing that was even more important. He proposed a mechanism for evolution. That mechanism was natural selection, and his idea was that in the natural world, there was constant variation arising, and that the environment would act on these variants to produce organisms that were more fitted to the environment, or in the opposite case, if the variations were less fit, that organism would be wiped out.

Science operates only on mechanistic explanations. We seek mechanistic explanations for all the phenomena that we see in the world, and that's all because that's all we can test as scientists. We cannot test supernatural explanations like creators or designers or anything that's outside our mechanistic realm.

So, it's unlikely that we're ever going to convince creationists or intelligent-design people the correctness of the theory of evolution and that's just the way it is in the United States. We keep amassing the evidence for evolution. Why don't people believe in evolution? I think it gives them comfort to have the idea of a creator that they can turn to in times of crisis.

Mechanistic explanations appear to be cold and devoid of moral value and so forth. So, they're not very satisfying to people who hold religious views about things.