

# Summary of a biology article



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Summary The article provides a scientific explanation for the existence of a wolf in the Falkland Island the presence of which had even puzzled Charles Darwin when he visited the Island. He had however noted that the Falkland wolfs, the only land mammal on the Island, bore very little similarity to the canids that were found in the mainland. The evolution and existence of a new species on the island has since baffled many scientists but by the year 1876 the Falkland wolfs were almost extinct and with no scientific evidence as to how it came in to existence. However specimens of the species have been preserved and a recent analysis carried out, in four places namely London, Liverpool, Philadelphia and New Zealand, on the mitochondrial genome have given new insights regarding the origins of this mammal. Through this researchers have discovered that the closest living relative to the Falkland wolf is the South-American maned wolf. While Darwin had observed certain striking differences between these two animals, genetic analysis however show that species divergence might have taken place about 6. 7 million years ago resulting in the migration of the species. Scientists believe that the Falkland wolves might have used large icebergs along with sufficient as means of transportation to the island. Darwin had made a special mention about the differences between the mainland and island wolves in his notes and also mentioned that if answers be found for these differences it would really help to ascertain the stability of species. Darwin's theory of evolution asserts that variation within the same species is a random phenomenon and survival or extinction of an organism is based on its ability to adapt to its environment in which it exists. If an organism adapts well to its environment by imbibing favorable variations it would thus be able to survive and reproduce at a higher rate. Such a state

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would determine the stability of the species within that particular environment. His study includes both plants and animals and the specimens analyzed by Darwin include plants, birds and animals and in addition he also collected different types of fossils during his expedition in the Beagle to South America. According to his evolution theory changes in the environment might result in divergence of species based on which environment they best adapt. A similar phenomenon has also occurred in the case of the Falkland wolves. According to the genetic analysis report divergence of the two species from a common ancestor has taken place even before the two animals migrated to the environments that they were best adapted. Thus this is proof of Darwin's theory of evolution that many species originate from a single ancestor and depending on the habitat they either continue to live in that environment or migrate to another favorable environment.

Darwin has noted the presence of a common ancestor and divergent evolution in several species, one example of which is the red fox and kit fox. The wolves in the mainland and the island must have diverged during the course of their evolution into distinct species.

#### References

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