

For: SAP- Anthropology (Evolution)

Flamingo Example:

I have chosen to analyze from the film the example relating to the Salt Pan of Africa. This example displays all of Darwin's theories regarding natural selection and evolution as a whole. One of Darwin's observations was that environmental conditions change over time. This salt pan is an excellent example of that, as it is a remnant of an ancient lake that dried up thousands of years ago due to climate change. Back then, it was an extremely habitable region, while in the present, it hardly has any water, is hot and dry, and very little wildlife are able to survive. However, once in a while there is lots of rain! With this change comes the migration of one prominent species: Flamingos. These flocks of flamingos migrate from very far away to breed. Flamingos may migrate to the salt pans in times of good, but these conditions don't last forever, and the adult flamingos as well as their newly born chicks must be able to survive the harsh conditions. This is where we can observe some of Darwin's other observations: all species struggle for survival within their environment, and through natural selection, beneficial modifications are passed on. In the Salt Pans, the pH of the water means most species can't go in it or drink it. However, flamingos have specialized skin and scaly legs so that they aren't harmed by the water. And, flamingos are also able to drink the salty water because they have salt glands near their beaks. All of this means that not only can they happily drink at salt pans, but they can also be easily protected from predators. The flamingos also have long legs with webbed feet, that make it easier for them to walk through sand and mud faster. All of these helpful characteristics came about due to changing conditions. When flamingos' diets changed, and their habitats became more salty areas, the flamingos more suited to these things survived. For example, flamingos used to have much shorter legs and didn't used to be able to filter things out from their beak. Those who happened to have longer legs and different beak shapes, possibly due to mutation, would survive over those who didn't. There is even an example of this within the film. In the documentary, a chick is shown attempting to keep up with the rest of the group. However, it has not moved fast enough, so salt has begun to solidify on its legs, meaning it is slowed down even more, and eventually can't walk. This chick, unfortunately, most likely died due to its inability to get through the salt. This chick's legs were probably less strong and shorter, so it was slower and less able to keep up. As Darwin says, those with modifications best suited for their environment are preserved, while others, like the poor little chick, will die and not pass on their traits. In the end, this example displays how conditions can change over time, there is competition within populations, animals more suited to their environment will pass on traits while others won't survive, and evolution is a result of all of these factors.