

Reading Passage (267 words): Extinction of Dinosaurs

Millions and millions of years ago, dinosaurs roamed the earth. However, something happened, perhaps a gradual or sudden event leading to their extinction. Three main theories attempt to explain why these great reptilian creatures died out.

First of all, testes function in a narrow range of temperature. A worldwide rise in temperature at the close of the Cretaceous period caused the testes of dinosaurs to stop functioning and led to their extinction by sterilization of males.

Second of all, flowering plants first evolved toward the end of the dinosaurs' reign. Many of these plants contain psycho-active agents, avoided by mammals today as a result of their bitter taste. Dinosaurs had neither the means to taste the bitterness nor livers effective enough to detoxify the substances. They died of massive overdoses.

Finally, a large comet or asteroid struck the earth some 65 million years ago, lofting a cloud of dust into the sky and blocking sunlight, thereby suppressing photosynthesis and so drastically lowering world temperatures that dinosaurs and hosts of other creatures became extinct.

While no one can be completely sure, most researchers believe that dinosaurs became extinct, perhaps due to the sterilization of males, the overdose of poisonous flowering plants, or a cataclysmic event such as impact from a large asteroid.

Writing Prompt: How does the information in the lecture cast doubt on the information in the reading passage?

Lecture (340 words): Extinction of Dinosaurs

In order to test the validity of testicular theory regarding the extinction of dinosaurs, we would have to know things that unfortunately the fossil record cannot provide. What temperatures were optimal for dinosaurs? Could they absorb the excess heat by staying in the shade or in caves. At what temperatures did their testicles cease to function? Were the late Cretaceous climates ever warm enough to drive the internal temperatures of dinosaurs close to this ceiling? Testicles, since they are soft tissue, simply do not fossilize. Therefore, this theory is untestable and unusable.

Seigel's overdosing theory has even less going for it. How can we know, for example, what dinosaurs tasted and what their livers could do. Livers do not fossilize any better than testicles. Furthermore, the overdosing theory does not make sense in its own context. Angiosperms were in full flower ten million years before dinosaurs became extinct. Why did it take so long for them to die of overdoses. As for the pain of a chemical death recorded in the contortion of fossils, I regret to say Siegel's knowledge of geology is a bit deficient: Muscles contract after death, and geological strata rise and fall with motions of the Earth's crust after burial-more than enough reason to distort a fossil's pristine appearance.

Regarding the idea that dinosaurs were killed due to a large meteor which may have impacted the earth, a number of scientists have disagreed with this idea. They do not dispute that a large meteor may have impacted the earth millions of years ago. However, they claim mass extinctions of the dinosaurs took place 300,000 years after the asteroid impact. Furthermore, another problem with the impact extinction theory is that the meteor impact may not have had the radical extinction effects on plants and animals as we previously thought. For example, researchers found a total of 52 fossilized species that appeared to be happily living BEFORE the layer of impact sediment, and the same 52 species appeared to be happily living AFTER the layer of impact sediment.