

reptiles are doomed. Their bodies either freeze or become so inactive that they cannot move. Reptiles have no method of converting their food into heat energy to stay alive. They must hibernate, seek shelter in a burrow deep underground, or die. But where would a ten-ton dinosaur go to seek shelter from a raging blizzard? They were not able to burrow into a hole like a snake or lizard. At the onset of winter, they perished.

While this climate change undoubtedly occurred and affected the dinosaurs, there are three problems with listing it as the major cause of the dinosaurs' extinction. The first problem is that they were not alone in their downfall 63 million years ago, and any major explanation for their extinction must also explain the extinction of other forms of life at the same time. Vast groups of marine plankton, land plants, and marine invertebrates including some species of clams and oysters were also wiped out. It has been estimated that more than 75% of the previously existing plant and animal life disappeared at about the same time as the dinosaurs.¹ However, the marine invertebrates as well as the ocean-dwelling dinosaurs should have been protected from extremes of temperature by the ocean waters.

The second problem with the climatic causation theory is that the temperature change was thought to have been somewhat gradual. Continents move very slowly, and, if evolutionary theory is correct, life should have adapted and adjusted to these changing conditions. It didn't. Further, there should have been a relatively warm and constant temperature belt around the equator as there is today. The dinosaurs should have survived in these warm pockets as did the crocodiles. They didn't. Some dinosaurs survived longer than others, but they all ultimately perished.

The third problem with listing the gradual climate change as the cause of the dinosaurs' downfall is that there is no evidence to indicate they were on a gradual decline. Toward the end of the Mesozoic era the diversity of dinosaur species did not decrease. In Mongolia the diversity actually increased.² Such an increase in the number of varied species is the reverse of what scientists expect from a group that is tending toward extinction.

Although a gradually changing climate may have contributed to the demise of the dinosaurs, their relatively sudden demise together with the extinction of other plants and animals has led scientists to search for a more catastrophic explanation.

Catastrophic Explanations. There are three general catastrophic explanations for the demise of the dinosaurs: magnetic field reversal,