

Extinctions at the End of the Cretaceous

It has long been **recognized** that the dinosaurs disappeared from the fossil record at the end of the Cretaceous period (65 million years ago), and as more knowledge has been gained, we have learned that many other organisms disappeared at about the same time. The microscopic plankton (free-floating plants and animals) with calcareous shells suffered massively. The foundation of the major marine food chain that led from the minute plankton to shelled animals to large marine reptiles had collapsed.

On land it was not only the large animals that became extinct. The mammals, most of which were small, lost some 35 percent of their species worldwide. Plants were also affected. For example, in North America 79 percent did not survive, and it has been noted that the survivors were often deciduous they could lose their leaves and shut down while others could survive as seeds. As in the sea, it seems that on the land one key food chain collapsed: the one with leaves as its basic raw material. These leaves were the food of some of the mammals and of the herbivorous dinosaurs, which in turn were fed on by the carnivorous dinosaurs. Furthermore, it is most likely that these large dinosaurs had slow rates of reproduction, which always increases the risk of extinction. Crocodiles, tortoises, birds, and insects seem to have been little affected. The two first named are known to be able to survive for long periods without food, and both can be scavengers (feed on dead material). Indeed, with the deaths of so many other animals and with much dead plant material, the food chain based on detritus would have been well-supplied. Many insects feed on dead material; furthermore, most have at least one resting stage in which they are very resistant to damage. In unfavorable conditions some may take a long time to develop: there is a record of a beetle larva living in dead wood for over 40 years before becoming an adult. Some birds were scavengers, but the survival of many lineages is a puzzle.

1. The word "**recognized**" in the passage is closest in meaning to
 - A. suspected
 - B. argued
 - C. assumed
 - D. accepted

2. According to paragraph 1, which of the following was true of small planktonic organisms at the end of the Cretaceous
 - A. They lost their main sources of food.
 - B. They developed calcareous shells.
 - C. They decreased greatly in number as did many other types of organisms.
 - D. They replaced other minute organisms as a food source in the major marine food chain.

3. Which of the following statements is NOT supported by the information provided in paragraph 2 about extinctions at the end of the Cretaceous

- A. About 35 percent of mammal species were lost.
- B. 79 percent of North American plants disappeared.
- C. Most birds, tortoises, and crocodiles escaped extinction.
- D. Deciduous trees were especially likely to go extinct.

Ans: DAD