

# Why Did the Dinosaurs Disappear?

By Karen Sapp

Once dinosaurs lived on the earth. Then they disappeared or died out. What happened to them?

Many other animals, including animals that lived in the sea and animals that flew through the air also died out. Many plants died too.

No one knows for sure what happened, but scientists have some ideas.

Some scientists think that new kinds of plants started growing because of changes in the climate. Their idea is that these plants poisoned dinosaurs that ate them. Then meat-eating dinosaurs starved to death when they could not find plant-eating dinosaurs to eat. There is a problem with this idea. Only land animals would have eaten the poisonous plants, but sea animals died, too. Besides, this idea does not explain why some kinds of plants also died out.

Did other animals cause the death of the dinosaurs? Maybe small animals stole and ate dinosaur eggs before they could hatch. This would explain what happened to dinosaurs that laid eggs. But what about dinosaurs that were born live? What about the sea animals and plants that died, too?

Many scientists think that the dinosaurs died out because the earth became very cold. Most dinosaurs could not live in very cold weather. They did not have fur or feathers to keep them warm. Dinosaurs were so huge they could not burrow into the ground for warmth and protection. But what could make the weather become so cold?

The earth long ago was not at all like it is today. Huge earthquakes made the water in the oceans rise and fall many times. When the water level fell, there was more moisture in the air. This caused more rain and colder weather. The earthquakes also made volcanoes erupt all over the world. Some scientists think that a giant volcano in the part of the world we now call India erupted for many, many years!

All this time, it blew so much ash and dust into the air that the sun's rays could not reach the earth. Imagine what it would be like never to see the sun! The earth grew very cold. Plants died without the sunlight. Without plants to eat, the plant-eating dinosaurs died. Then the meat-eaters died.

In 1978, a new discovery gave some scientists another idea about why the

earth became so cold.

Scientists found a thin layer of clay in many places all over the world. The clay is made up of dust from the time the dinosaurs were dying out. This clay has large amounts of a very rare metal, called *iridium*, that is usually deep inside the earth. When iridium is found near the earth's surface, it usually came from space, in the form of meteorites.

*Meteorites* are chunks of stone or metal that have crashed to the earth. Most of the time, meteorites do not hit the earth hard enough to do much damage. Sometimes, though, a very large meteorite crashes. When this happens, it makes a huge hole, or *crater*, in the ground.

In 1980, a crater was found in Mexico. Scientists think the crater was made about the time the dinosaurs disappeared. They think the meteorite that caused this crater was 6 miles long.

Imagine something that big hitting the earth! It would blast millions of tons of dust and rock into the sky. Heat caused by the crash would start many fires. The smoke from those fires would add soot to the air. (Scientists found large amounts of soot mixed in with the iridium).

The thick cloud of dust, rock, and smoke would swirl around the world, blocking the sunlight for months or even years. Without sunlight, the earth would grow very cold. When the dust finally settled, it would form a layer of clay, and in the clay there would be large amounts of iridium. This is exactly what some scientists think happened. Again, their idea is that the lack of sunshine caused dinosaurs and other life forms to die.

Some scientists think that both the volcano idea and the meteorite idea could be correct. There are two ways this might work. One is that a meteorite might have hit the earth hard enough to make the volcanoes erupt. Another way is that the volcanoes could have been erupting for many years, slowly killing plants and animals. Then, when a meteorite hit, it quickly finished the job.

No one really knows for sure why the dinosaurs disappeared, but many scientists are still trying to find out