

Birds vs. Dinosaurs

One hundred and fifty million years ago, the first birds evolved from dinosaurs. These feathery creatures lived together with other dinosaurs for over 80 million years. So why are some birds still alive today when the other dinosaurs went extinct? It might be because of their beaks.

Sixty-six million years ago, an asteroid struck the Earth. The impact sparked fires. Ash from the fires blocked the sun. The Earth experienced a long winter. More than 75 percent of species died. Beaked birds were the only dinosaurs to survive.

Non-bird dinosaurs and bird dinosaurs with teeth instead of beaks did not make it. Researchers think they died because there was not enough food for them. They were specialized to eat insects, meat, and lush vegetation. None of these were available after the asteroid hit.

Meanwhile, the beaked dinosaurs had been evolving to eat other types of food. These beaked birds ate seeds and nuts in addition to other plant foods. Seeds and nuts were among the few items that survived the blast. The beaked birds ate the seeds of the destroyed forests until the vegetation started to grow back.

Even some beaked birds did not survive the asteroid. *Vegavis*, which looked like a duck, did not make it though the long winter. Scientists think the

birds who had powerful gizzards to crush tough seeds had an advantage among the beaked dinosaurs.

Research shows that modern bird groups, like relatives of ducks, parrots, and chickens, were alive at the time of the asteroid. They evolved into new bird species in the millions of years following the dinosaur extinction. Many of the birds became smaller. Even though they shrank, their brains stayed the same size. This fact made them more intelligent than their non-bird dinosaur ancestors.

Scientists still have a lot to learn about birds and dinosaurs. They hope to find new fossils to fill in the gaps of their knowledge.



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NAME: _____ DATE: _____

1. Which of the following things happened when the asteroid hit the Earth?
 - a. Fires started
 - b. Ash blocked the sun
 - c. Earth had a long winter
 - d. All of the above

2. What do gizzards do?
 - a. Catch insects
 - b. Chew plants
 - c. Mash up fruit
 - d. Crush seeds

3. Why are modern birds more intelligent than their non-bird dinosaur ancestors?
 - a. Their brains got bigger
 - b. They got smaller but their brains stayed the same size
 - c. They had beaks
 - d. They could eat seeds

4. What does the author mean by “to fill in the gaps of their knowledge”?
 - a. To learn more
 - b. To prove what they know
 - c. To create a new theory
 - d. To discover a new species

Instructions for teachers:

These questions can be used to assess understanding of the reading passage.

The item in bold is the correct answer for each question.

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