

Old Bones Dug Up

adapted by Ian Alexander



Set Your Purpose

What unusual discoveries have scientists made about animals that lived long ago?

Read this article to find out.

Long Ago

An **astounding** thing happened ten million years ago. A group of animals gathered at a watering hole near Royal, Nebraska. Barrel-bodied rhinoceroses, 15-foot giraffe camels, and other creatures came to drink. Then a volcano erupted 1,000 miles away. Wind carried the volcanic **ash** great distances. The ash rained down over the animals and buried them.

More Recent Times

Dr. Michael Voorhies grew up in Nebraska. As a boy, he thought that he would have to visit Africa to see rhinos and camels. Then, in 1971, a strange thing happened.

He found a baby rhino skull in Nebraska! He dug around it. It was still attached to its skeleton. He kept digging and found five more rhino skeletons. At this point, he knew that he had discovered a special place. It was to become the find of a lifetime!

Treasures in Ash

So far paleontologists (pail-ee-on-TOL-o-jists), or fossil scientists, have found more than 240 **complete** animal skeletons near Royal, Nebraska. They even discovered the remains of a tiny three-toed horse. The ash preserved the bones almost perfectly. Many skeletons stayed whole.

The Whole Story

Finding so many whole skeletons in one place is very unusual. Usually bones are **scattered** far apart. This happens because wind blows them or waves pull them out to sea. Other animals can drag them away to eat. But the animals at this site lay just as they fell. Volcanic ash buried them so quickly that their skeletons never moved.

Prehistoric Habits

Scientists have learned a lot from the fossils. They found more than 100 rhinos together at this site. This means that **ancient** rhinos may have lived in big groups. Today most rhinos live alone. The scientists also found grass seed inside one rhino. Now they know more about what the animals ate. Scientists are still digging to find even more bones. This site has become the Ashfall Fossil Beds State Park. Here, visitors can watch the scientists uncover and study the fossils.

Think About It

What is the most important thing you learned about ancient animals?

Date _____

Check Your Understanding

Fill in the letter with the best answer for each question.

- What is the main idea of the first paragraph?
 - Volcanic ash buried rhinoceroses at an ancient watering hole.
 - Volcanic ash buried giraffe camels at an ancient watering hole.
 - Volcanic ash buried a group of animals at an ancient watering hole.
 - Scientists have discovered the bones of a tiny, three-toed horse.
- What is the main idea of the third paragraph?
 - Dr. Voorhies grew up in Nebraska.
 - Dr. Voorhies found a baby rhino skull near Royal, Nebraska.
 - Dr. Voorhies dug around the baby rhino skull.
 - Dr. Voorhies had made the find of a lifetime.
- What is the main idea of the fifth paragraph?
 - The wind can blow bones away.
 - Finding many whole skeletons in one place is unusual.
 - Waves can drag bones out to sea.
 - Animals sometimes drag bones away to eat.
- Scientists who study fossils are called
 - voorhies.
 - visitors.
 - paleontologists.
 - rhinoceroses.
- Paleontologists were surprised to learn that
 - visitors like to watch them uncover fossils.
 - today, most rhinos live alone.
 - ancient rhinos may have lived in groups.
 - ancient animals drank water.

Vocabulary

Find each vocabulary word in the selection. The words and sentences around it will help you figure out its meaning.

Fill in the letter with the best definition of the underlined word.

- An astounding thing happened ten million years ago.
 - very loud
 - surprising
 - very dull
 - ordinary
- Wind carried volcanic ash great distances.
 - rocks
 - trees
 - loud noise
 - powder that remains after something burns
- Scientists have found more than 240 complete animal skeletons near Royal, Nebraska.
 - whole
 - partial
 - very small
 - irregular
- Usually bones are scattered far apart.
 - in a circle
 - picked up
 - in a neat pile
 - spread out in different places
- This means that ancient rhinos may have lived in big groups.
 - very new
 - very old
 - born today
 - very tall

Name _____

Date _____

Word Work

Synonyms are words that have similar meanings. For example, *little* and *small* are synonyms.

Read the sentences and the words below. Write the word that means almost the same as the word in dark type.

whole discovered location
realized covered

1. Dr. Voorhies **knew** that the watering hole was a very special place. _____
2. Volcanic ash had preserved many **complete** skeletons. _____
3. The skeletons were **buried** by the volcanic ash. _____
4. He **found** rhino skeletons right here in Nebraska. _____
5. Finding many skeletons in one **place** was very unusual. _____

The sound /**ow**/ can be spelled in several ways:

ow as in **cow** **ou** as in **out**

The sound /**oy**/ can also be spelled in several different ways:

oi as in **coin** **oy** as in **toy**

Each sentence below has an incomplete word. Add **ow**, **ou**, **oi**, or **oy** to complete the word.

6. It was **ast**_____ **nding** to find the skeleton of a three-toed horse.
7. Dr. Voorhies **p**_____ **nted** out where he discovered the baby rhino skull.
8. The soil **ar**_____ **nd** the spot was soft and loose.
9. A grown male rhino is called a bull; a grown female rhino is called a **c**_____.
10. As a **b**_____, Dr. Voorhies dreamed of becoming a paleontologist.

Write Now

In the article "Old Bones Dug Up," you found out what unusual discoveries scientists have made about animals that lived long ago. Look at the chart. It shows a main idea and details from one paragraph in the article.

- Plan to write a postcard to a friend about a visit to Ashfall Fossil Beds State Park. Make a chart like the one shown. Think of how you would describe the experience in a postcard.
- Use your chart to help you write your postcard. State your main idea first. Then, list the most important detail first followed by other details.

Main Idea

It is unusual to find many whole skeletons in one place.

Details

The wind can blow bones away.

Waves can drag bones out to sea.

Animals sometimes drag bones away to eat.