Carlsbad Caverns

National Park Service U.S. Department of the Interior

Carlsbad Caverns National Park



Junior Ranger



Welcome to Carlsbad Caverns National Park!

Become a junior ranger by completing **7 of the first 15** activities listed below and What I Can Do! (page 14). Check the box next to each activity you complete. When you are finished, take it to the information desk to receive a junior ranger badge.

This book belongs to:



Activity

- 1. Respect and Protect (page 2)
- 2. Cavern Scavenger Hunt (page 3)
- **3**. Mapping a Cavern (page 4)
- 4. The Carlsbad Cavern Story (page 5)
- 5. Ask a Ranger (page 6)
- 6. Go Take a Hike (page 7)
- 7. Geology Rocks! (page 8)
- 8. What's the Word? (pages 9–10)
- 9. Cavern Word Search (page 11)
- 10. Winged Wonders (page 12)
- 11. Carlsbad Caverns Diamante (page 13)
- 12. Hike the Natural Entrance Trail
- 13. Walk Through the Big Room
- 14. Attend a Ranger-Guided Tour or Program
- 15. Watch the Park Movie
- 16. What I Can Do! (page 14)

COVER & INSIDE FRONT: © KELLI HOUSLEY

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Respect and Protect

It is important that we all do our part to protect the cavern and ourselves. In the drawing below, circle what is wrong to identify how to correctly protect the cavern. Then answer the questions at the bottom.



- 1. Imagine you saw someone breaking a cavern rule. What would you do?
- 2. Carlsbad Caverns National Park has about 500,000 visitors every year. If every visitor took a formation, what would the cavern look like in the future?
- 3. Why is it important to follow the rules in the cavern?

Cavern Scavenger Hunt

Mark the box for the cave formations or historic artifacts you see as you visit the cavern. How many can you find?



NPS / DUSTIN BAKER ILLUSTRATIONS

Mapping a Cavern

Cave surveying is an important task to help map and understand a cave. A team consists of three to four members, and one person is always in charge of sketching new passages. Imagine you are now a surveyer, in charge of drawing a newly discovered room in Carlsbad Cavern. Use the key below to add features to the room. Be sure to give your discovery a name!



The Carlsbad Cavern Story

Use the key below to fill in the blanks and piece together the human history of Carlsbad Cavern.



for thousands of years. American Indians, like the Mescalero <u>1 16 1 3 8 5</u> tribe, lived near the Natural Entrance, long before the early settlers knew the cavern existed. Around 1898, a <u>3 15 23 2 15 25</u> named Jim White followed what he thought was smoke on the horizon. But when he came closer, he realized it was hundreds of thousands of _____2 ___18 ___ 26 ___9 ___12 ___9 ___ 14 free-tailed bats "boiling" out of a large cave. Jim made a

<u>12 1 4 4 5 18</u> out of fence wire and sticks to investigate the a few $\underline{}_{2 \ \overline{18} \ \overline{1} \ \overline{22} \ 5}$ adventurers, but others were more interested in the bats. Miners like Abijah Long found value in $\underline{7 \ 21 \ 1 \ 14 \ 15}$ deposits, and started removing it in 1903. Some of the guano was 40 feet (12 meters) deep! It was processed and shipped to California as ______ for the citrus groves. Soon, the unique geology and history became far more





in 1930 to importance of the park led to its designation as a World $\frac{1}{8} - \frac{1}{5} - \frac{1}{18} - \frac{1}{9} - \frac{1}{20} - \frac{1}{1} - \frac{1}{7} - \frac{1}{5}$ Site in 1995. Now, people from all over the world come to be inspired by this cavern's beauty. How will you help protect this park for_____6 _21 _20 _21 _18 _5 generations?



Ask a Ranger

Find a park ranger or volunteer and ask the questions below.

- 1. What is your name?
- 2. What is your job in the park?
- 3. What is a park close to where you grew up?
- 4. What was the first national park you ever visited?
- 5. Why do you think Carlsbad Caverns National Park is important?
- 6. What is Carlsbad Cavern's most famous animal and what does it eat?
- 7. Who owns the national parks?





Go Take a Hike

Walk the 1/2 mile (0.8 km) Nature Trail at the east end of the parking lot. Ask a park ranger for directions.

As you walk, look at the diversity of plants that are native to the Chihuahuan Desert. Use the signs along the trail and identify the plants below, using the word bank at the bottom of the page to help you. Write at least one thing you observed or learned about each plant.



NPS / LAUREL MCKENZIE ILLUSTRATIONS

Geology Rocks!

Read the geologic story of the cavern and complete the activity below.

There are beautiful rock decorations in the cavern. These formations are made by drops of water that have slowly trickled through the ground. As it travels underground, the water picks up calcite (as well as other minerals) along the way. When the water drips in the cavern, it evaporates and leaves calcite behind. Calcite formations grow very slowly and are very fragile. It takes years for them to grow, but only one careless moment to destroy them.

Help Roslin the Raindrop travel to the Big Room by finding the path through the maze.



What's the Word?

Use the clues and word bank below to complete the crossword on the following page.

ACROSS

- 2. Carlsbad Caverns National Park is located in the _____ Desert.
- 5. These representatives of United States citizens made Carlsbad Caverns a national park in 1930.
- 6. Cave formations are often made up of this type of mineral.
- 8. A type of environment that receives very little precipitation (rain and snow).
- 9. Carlsbad Caverns and other national parks are protected and set aside for the _____ of resources.
- 11. Like many caves, Carlsbad Cavern formed in this kind of rock.
- 13. Fossils of ocean creatures, like trilobites, are found in the park. This indicates that millions of years ago, this area was covered by an inland _____.

WORD	BANK

Chihuahuan

Invasive

Sea

Calcite

Limestone

Milky Way

Helmet

Preservation

Tailed

Arid

Bottomless

Guano

Congress

DOWN

- 1. Visible on a dark and clear night at the park, this is a dusty white band of stars that stretches across the sky.
- 3. Found in the Big Room, the Pit is actually 140 feet (43 meters) deep and a favorite for many visitors.
- 4. A caver wears this on their head for safety when exploring wild caves.
- 7. Another word for bat droppings which were once mined from Carlsbad Cavern to be used as fertilizer.
- 10. From April through October, Carlsbad Cavern is home to thousands of migratory bats. These bats are called Brazilian free-____bats.
- 12. These species from a different place are introduced and ultimately harm native habitats.



Cavern Word Search

Complete the word search by finding the underlined words in the puzzle.



Carlsbad Caverns National Park has more wildlife than first meets the eye—both above and below ground! The Chihuahuan Desert is the most biologically diverse desert in the Western Hemisphere. There are many species of <u>SNAKES</u> that hide beneath rocks. As you drive into the park, you might be lucky enough to see a <u>TARANTULA</u> cross the road. It may look like a pig, but the <u>JAVELINA</u> is more closely related to the hippopotamus. Some animals are rare to see, but you can hear them calling into the night, like the <u>COYOTE</u>. It is not unusual to see a <u>RINGTAIL</u> hanging around the cavern, hoping to snag one of our Brazilian free-tailed <u>BATS</u> as they leave for dinner. These famous mammals are not to be confused with the cave <u>SWALLOWS</u> that make their mud nests in the cavern entrance. Keep your eyes open for New Mexico's state bird, the <u>ROADRUNNER</u>, too!

A <u>TROGLOBITE</u> is a creature that lives inside the cavern all year round, many are found in this cave. There are countless varieties of <u>MICROBES</u> that are helping scientific research—including finding life

on other planets! You may not be able to spot the tiny <u>CAVE SPIDERS</u> on some of our active formations, but you may be lucky in seeing at least one of the three species of <u>CRICKETS</u> that live here. One of these species was even discovered here! There are several types of <u>BEETLES</u> that depend on other insects for survival. But perhaps the most bizarre cave creature is the <u>HORSEHAIR WORM</u>, a parasite that lives in cave pools.



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Winged Wonders

Carlsbad Caverns National Park is home to many species of bats. However, these amazing creatures are often misunderstood. Decide whether each statement below is true or false, then create your own story at the bottom of the page.

- True / False Bats are flying mammals.
- True / False Bats like to live in people's hair.
- True / False Bats are helpful because some species eat a lot of insects.
- True / False All bats have rabies.
- True / False Like mice, bats are rodents.
- True / False Bats are blind.
- True / False All bats are vampires that eat blood.



Some ancient cultures wrote stories to explain how bats came to be today. Many tribes in southeast New Mexico believe that bats are messengers between the spirit world and the real world. If you throw your moccasin in the air and catch a bat, good luck is on the way!

Come up with your own personal legend about these magical animals. Try to use some of what you have seen and learned during your visit to Carlsbad Caverns National Park in your story. Townsends Big Eared Boot

Carlsbad Caverns Diamante

Diamantes are a special kind of poem shaped like a diamond. They are seven lines long and have a special pattern. Choose something you learned about at the park during your visit. Create your poem below by picking words to describe the first word. Use the example below for inspiration.



What I Can Do!

The junior ranger motto is "Explore, Learn, and Protect." Answer the questions below to explain how you can achieve these important goals.

- 1. One way I can explore my environment at home is by:
- 2. One place where I can go to learn more about plants and animals near my home is:
- 3. I can help protect plants, animals, and the environment near my home by:





