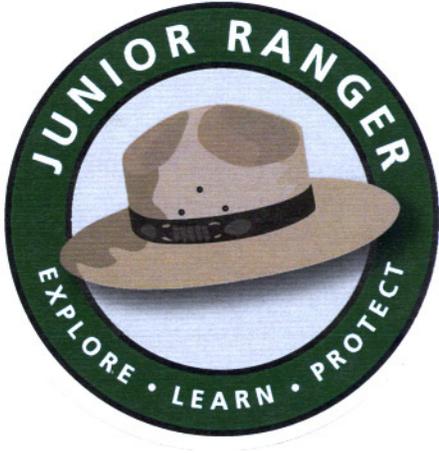


Guadalupe Mountains National Park



Junior Ranger Program



Welcome to Guadalupe Mountains

Guadalupe Mountains National Park is one of over 390 unique places preserved as part of our national park system. As a Junior Ranger, you will have an opportunity to discover some of the fantastic places that make this one of America's treasures preserved by the National Park Service. You are an important partner in protecting this national park and keeping it beautiful for future generations.

To Become a Junior Ranger:

To earn the Junior Ranger badge:

- Complete any 3 activities in this book.

To earn the Junior Ranger badge and patch:

- Complete any 6 activities in this book

- Parents are allowed to help.
- When you are finished, bring your booklet to the Visitor Center for a park ranger to check and sign it.

Other Ways to Explore Guadalupe Mountains National Park and Become a Junior Ranger:

(If you are short on time, these activities may be substituted for activities in this book.)

- Watch the 12 minute slide show in the Pine Springs Visitor Center.
- Watch the McKittrick Canyon slide show at the McKittrick Canyon Contact Station.
- Attend a ranger led program.
- Go on a hike.

Safety Always Comes First:

As a Junior Ranger it is always important to make sure that you explore the park in a safe and responsible manner.

- Drink plenty of water when exploring the desert. This is a very dry place and you must replenish your water reserves often, even if you don't feel thirsty.
- Wear sunscreen. The desert sun can burn you very quickly.
- Stay on trails. Rattlesnakes and scorpions may be encountered off the trail.
- Remember not to wander away from adults. Mountain lions have been encountered in the park. It is safest to stay in a group.
- Watch where you put your hands and feet. Dark places under rocks, crevices, and holes are often homes for spiders, snakes, or scorpions.
- Be careful around cacti and thorny bushes. Spines and thorns can be very painful and difficult to remove.

Don't feed the wildlife. This can be very dangerous for animals as well as people. Animals are wild and may bite.



1. Animal Tracks

The *Guadalupe Mountains* are home to many animals. In order to escape the desert heat, many of these animals only come out at night. Often, the tracks they leave behind are the only clues that we can use to see that they are here. Try to match the animals below with their tracks. Can you name each animal?

Write the name of each animal:



A. _____



B. _____



C. _____



D. _____



E. _____



F. _____



G. _____



H. _____

Write the letter for each animal under the track (They are not to scale):



Leave Only Footprints:

Animals roam around the desert leaving only tracks behind to tell of their presence. We can learn an important lesson from them. In order to preserve the fragile desert environment, we should try to leave no trace of our presence here except for our footprints.

Everything is protected at *Guadalupe Mountains National Park*. Leave all animals, plants, rocks, and artifacts where you find them so that others may enjoy them later.

2. Animal Adaptations



kit Fox

Guadalupe Mountains National Park is located in the northern part of the Chihuahuan Desert. Deserts are places of hot temperatures and little rain. What little rain does fall quickly evaporates. Animals that live here need to adapt to life in this rather harsh environment. They need to find ways to stay cool and to conserve water. Many animals avoid the hottest temperatures by only coming out at night. These animals are called nocturnal. Other animals burrow underground to avoid the hottest part of the day.

Jackrabbits use their large ears to radiate heat away from their bodies. Many rodents like kangaroo rats never need to drink water. They get all



javelina

of the water they need through the moist plants that they eat. Many desert animals are light colored so that they can reflect heat away from their bodies. These are all special adaptations that allow these animals to survive in the desert environment.



jackrabbit

Create your own unique animal that would be well adapted to survive in the desert, and draw a picture of it below.

Give your animal a name.

Where does your animal live?

What does it eat?

Does it have any enemies?

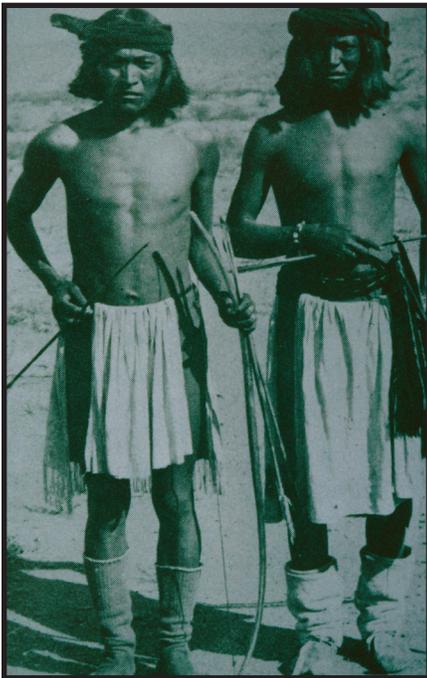
What are this animal's adaptations?

3. Could You Survive Here?

Archeologists believe that the first humans in the Guadalupe Mountains were hunter-gatherers that arrived here between ten and twelve thousand years ago. Although very little is known about these people, we still find evidence that they were here; projectile points, baskets, pottery, petroglyphs, and pictographs. (Petroglyphs are images carved into the rocks; pictographs are images painted on rocks.)



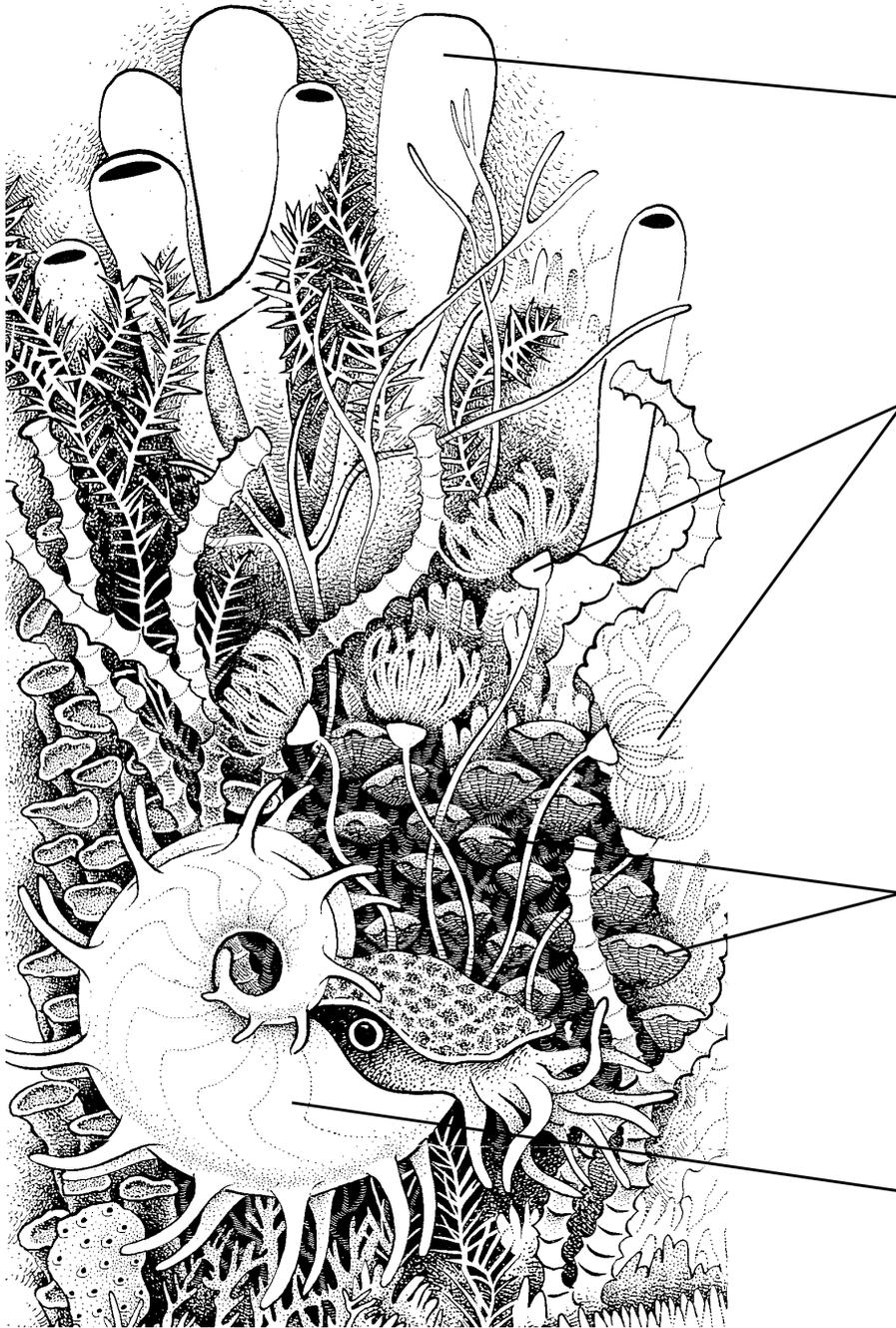
Later came the Mescalero Apaches. They survived here by learning to utilize the native animals and plants. The Mescaleros hunted mule deer, elk, and bighorn sheep, and harvested plants like agave, sotol, and bear grass. The Mescalero Apaches were named for their reliance on the mescal, or agave, which formed the major staple in both their diet and culture. In addition to supplying fiber for ropes, blankets, and sandals, agave hearts were roasted in large cooking pits and eaten or made into cakes that could be eaten later.



Take a walk on one of the trails in the park (the Pinery Trail, Manzanita Springs, Smith Springs, McKittrick Canyon, Campground Trail, McKittrick Nature Trail, etc). Imagine that you had to survive here without any modern conveniences. Think about where you would live. What would you eat? What could you use for shelter? What could you use for clothing or for tools? Look at the different plants and animals that you see here. Try to come up with some ways that you might be able to use these plants or animals if you had to survive here. Draw a picture of the plants or animals and write down their possible uses below.

4. Life During Permian Times

The Guadalupe Mountains formed as a reef made up of sponges and algae, along with other marine life, at the edge of a sea that covered this land approximately 250 million years ago. Fossils of ancient sea creatures can still be found throughout the Guadalupes. Remember to always leave fossils where you find them, so that others may enjoy them in the future. Identify and color the animals of the reef below. You can use the fossil exhibit in the visitor center or the McKittrick Canyon Geology brochure to help find the answers.



What is the name of this primary reef builder?

What did it feed on?

What's another name for these "sea lilies"?

Where were they common?

What are these shelled creatures called?

What function did their shells serve?

What is the name of this animal?

What types of animals did it eat?

5. Wilderness

What does the word "wilderness" mean to you? What do you think it meant to settlers moving into the West? Do you think American Indians thought about wilderness differently?

The Wilderness Act of 1964 provides a legal definition of wilderness as a place where nature is allowed to exist without human interference and people may visit but they do not remain. Wilderness is part of who we are as Americans. American Indians depended on the bounty of wilderness for survival and held Earth and its wild places as sacred. The great western explorers Merriweather Lewis and William Clark were inspired by the untamed beauty of wilderness. But by 1890, the essential wildness of America seemed vulnerable to the endless march of industrialization and civilization. By the mid-1900s, even national parks and national forests seemed vulnerable to increased automobile traffic and development. In 1964, in a nearly unanimous vote, Congress enacted landmark legislation that permanently protected some of the most natural and undisturbed places in America.

Over half of Guadalupe Mountains National Park is congressionally designated Wilderness. When Congress and the President designate an area "Wilderness", they are giving public land the highest level of protection possible. This added level of protection is permanent and backed by law. By protecting the core of Guadalupe Mountains National Park as Wilderness, the park becomes an area of clean air and water for nearby communities and a safe place for rare animals like Mexican spotted owls, elk, black bear and mountain lions. People who visit the Guadalupe Mountains Wilderness get to experience solitude, adventure, challenge and renewal. Wilderness offers us a chance to see the land in the same condition when Spanish explorers, Mescalero Apaches and settlers came through here. It is also a promise to the children of today and tomorrow that we are saving some of the best places for them to enjoy too.

- Look at a map of Guadalupe Mountains National Park. What does the green-shaded area represent?
- If you were to visit the Guadalupe Mountains Wilderness, how could you get there? Could you drive?

Something to think about...

- The Guadalupe Mountains Wilderness is home to mountain lions. Scientists estimate that there is enough habitat to support 3-8 adult lions. How does that make you feel?
- Would you be more or less likely to visit a Wilderness knowing it had large predators roaming free?
- If you chose not to visit, would Wilderness be important to you or not?
- Of the thousands of people who hike and backpack in the Wilderness, only a few will ever encounter a mountain lion. Why do you think lions are not seen more often?

6. The Butterfield Stage

Walk the Pinery Trail from the visitor center to the Pinery Station. Read the interpretive signs about the Butterfield Stage. Imagine what it would have been like to pass through the Guadalupe Mountains on the Butterfield Stage in 1858. Try to answer the following questions:



- Think about how you arrived here today. How would things be different in 1858?
- What dangers would you encounter while passing through the Guadalupe Mountains on the Butterfield Stage? What difficulties or discomforts would you experience?
- Why did the stage stop here at the Pinery?
- How many miles a day did the Butterfield Stage average?

7. Frijole Ranch



Visit Frijole Ranch and imagine what it must have been like to live here. Think about how life would have been for you if you grew up here at Frijole Ranch. What chores would you have? What would you do for entertainment? Where would you go to school? How could you help your parents to run the ranch?

Answer the following questions. The answers can be found on the signs at Frijole Ranch.

- What was the red building at the ranch used for?
- Why was the ranch built in this location?
- Which rooms in the ranch were built first?

8. Visitor Center Scavenger Hunt

Look at the display in the visitor center and try to find the following items. Write the name of each item in the space provided.

1. A fox that can climb trees.
2. A tree with dark red bark.
3. A white-crested bird that is common in arid grasslands and washes.
4. A nocturnal raccoon-like animal that can be found in rocky canyons and brushy arroyos.
5. A desert plant that was used extensively by the Mescalero Apaches. It produces a single, rapidly-flowering stalk just before it dies.
6. A common desert plant that has feathery plumes resembling an Apache headdress.
7. A common rock that is originated from living organisms or is precipitated out of marine water and makes up much of the Guadalupe Mountains.
8. A bird that impales its prey on thorns, spines, or barbed wire.
9. A burrowing animal that feeds on small mammals by invading their burrows.
10. A common rattlesnake that can easily be identified by its distinctive black tail.
11. A fairly common omnivorous animal that consumes a variety of fruit, insects, small mammals, and bird eggs.
12. An insect that preys on tarantulas.



9. What Do Park Rangers Do?

Park rangers at *Guadalupe Mountains National Park* have many different duties. Protection rangers enforce park regulations and assist in protecting visitors. Interpretive rangers educate visitors through talks, walks, and other interpretive programs. Resource management rangers study and research park resources in order to better protect them. Other rangers perform maintenance or administrative duties. They all work together to help protect and preserve the park's resources for both present and future generations.



What can you do to help protect and preserve *Guadalupe Mountains National Park*?

What can you do to help protect the environment in your own neighborhood?

Junior Ranger Pledge:

I _____ promise to help in the best way that I can to preserve America's National Parks. I will help others to enjoy learning about nature, history, and safety in our national parks. I will do my part to see that our national parks and everything in them are kept as they are for everyone to enjoy both now and in the future.

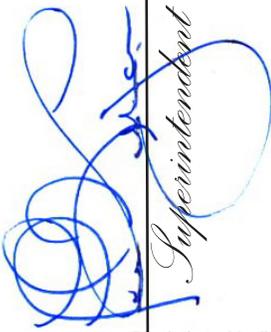
Certificate of Achievement



_____ is a Junior Ranger at Guadalupe

Mountains National Park, Texas





Superintendent

Park Ranger

Date

Chihuahuan Desert Fun Facts:

Did You Know...?

- Deer have antlers (not horns) that are shed each year. The antlers take about six months to grow to their full size.



- When diving for prey, peregrine falcons can reach speeds of up to 200 miles per hour. This makes the peregrine falcon one of the fastest animals on earth.
- A jackrabbit uses its large ears to radiate heat away from its body and help keep cool.
- Mountain lions are North America's second largest cat. Only the jaguar of Mexico and Central America is larger.



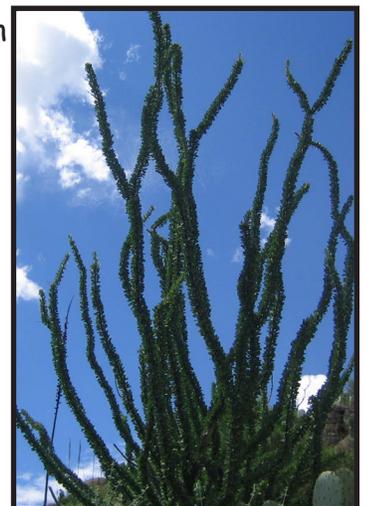
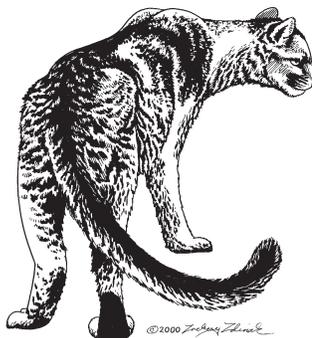
- Although roadrunners cannot fly for more than a few feet at a time, they can run at speeds of up to 15 miles per hour.



- A mesquite tree's roots can go 80 to 100 feet underground in order to reach water.
- An agave's flowering stalk can grow nearly a foot in just a single day.
- Scorpions are covered with several layers of wax so they lose water much more slowly than other desert animals.



- During dry conditions an ocotillo will drop all of its leaves in order to survive. It will grow new leaves after an adequate rainfall.
- If threatened, a horned lizard can shoot blood out of the corner of its eyes.



Other Junior Ranger Programs:

If you enjoyed participating in Guadalupe Mountains National Park's Junior Ranger Program, you may want to try the Junior Ranger Programs in these other Chihuahuan Desert parks: Carlsbad Caverns National Park, Big Bend National Park, White Sands National Monument, Fort Davis National Historic Site, Amistad National Recreation Area, and Chamizal National Memorial.