

# TEACHER GUIDE: Letter 5: Mule Deer

## CONCEPTS COVERED

Santa Rosa Plateau

- Animals
- Diversity
- Location
- Plants
- Weather

Representative animal—mule deer

- Characteristics
- Defense
- Enemies
- Food
- Habitat

Herbivores

Animal signs

- Scat
- Tracks

Predators

- Controlling animal populations

Reserve history

- Establishing the Reserve
- Grizzly bears
- Luiseno Indians--hunting

Staying safe on the Reserve

- What to do if you meet a mountain lion

## CONTENT VOCABULARY

**ancestor**—a person or animal from whom one is descended

**ancient**—very old; belonging to a time long ago

**antlers**—the two, large, branching, bony structures on the head of a deer, moose, or elk

**digest**—to break down food in the body so that it can be absorbed into the blood and used by the body

**fawn**—a baby deer

**herbivore**—an animal that only feeds on plants

**mammal**—a warm-blooded animal with fur or hair on its skin and a skeleton inside its body; females produce milk to feed their young; e.g. dogs, cows, elephants, mice, whales, humans

**mountain lion** (also cougar, puma, panther)—large (100 pounds) carnivorous cat

**mule deer**—large herbivore related to moose and elk

**sage**—any of various plants related to mint having grayish-green, spicy-smelling leaves; sometimes used as flavoring in cooking

**scat**—leftovers following digestion; poop

**survivor**—one who continues to live or exist following an accident or disaster that caused the death of others

**ticks**—small animals related to a spider that attach themselves to people and other animals and suck their blood; are known to spread disease

## **OTHER WORDS TO KNOW**

ancestors

antelope

camouflage

footprint

disease

habitat

hoof

zoo

mastodon

Santa Ana Mountains

California grizzly bear

## **THINGS TO THINK ABOUT**

Why is the Santa Rosa Plateau a good place for animals to live?

How did mule deer get their name?

What are two new things you learned about a mule deer?

How do deer defend themselves?

How can you tell if an animal is a mammal?

Why would you be lucky to see an animal when you visit the Reserve on your field trip?

If you don't see any animals, what signs might they have left to tell you they are there?

When Native Americans went hunting, what did they do to camouflage themselves?

Describe how a mountain lion hunts.

Give one reason why predators are important.

You are hiking with your family and you see a mountain lion. What should you do?

Why is it important to have places like the Santa Rosa Plateau Ecological Reserve?

## **FOLLOW-UP ACTIVITIES FOR STUDENTS**

Have students draw a picture of a carnivore, an herbivore, and an omnivore. Include the food they might eat in the drawing. Label their pictures (Remind students: no blood or gore.)

Play "Oh Deer" from Project Wild



Hello Third Grade Students!

Is it true that you are going to visit the Santa Rosa Plateau Ecological Reserve? You are really lucky. I live up here, and I think it is the greatest place in the world. I like everything about the Reserve. I like the weather. It is never too hot, because we get the cool ocean breezes in the summer. It is never too cold because we don't get much snow in the winter. I like the clear, refreshing water to drink in the tenajas along the Reserve's streams. They almost always have water--even during the summertime. I also like the many different habitats that are home to over 600 different kinds of plants. I really like having all those plants here because I am an herbivore. That means that I only eat plants.

Not only are there lots of different plants on the Plateau, but there are many different animals, too. Why are there so many different things living here? Well, the Santa Rosa Plateau is in the Santa Ana Mountains. Your bus is going to have to work hard to bring all of you up the hill to the Reserve. Because the Plateau is in the mountains, it rains more up here. More rain means more water for plants and animals. More water means that more kinds of plants and animals can live in a place.

I am one of the larger animals that live on the Reserve. I can walk all over the Plateau and go to the habitat I want. If I need water, I'll go to the riparian habitat. If I need shade, I'll visit the woodland. If I feel like eating some berries, I'll try the chaparral. When I was a baby, my mom hid me in the tall deer grass in the grassland. I'm a mule deer. I got my name because my long ears made people think of the ears on a mule. Check out my picture!

Did I tell you that I'm a mammal like you? That means I'm warm blooded. I grow hair, and I drank milk from my mom when I was a fawn. A fawn is a baby deer. I am younger than all of you, but I am much bigger. I weigh over 100 pounds. I'm a really fast runner. I can run up to 30 miles per hour! As I run, I can leap 20 feet at a time. I can also jump over eight feet straight up in the air!

Being a good runner and jumper helps me when I'm running away from danger. When you visit, you would be very lucky to see me. You will be on the trail in the middle of the day. That's when I usually find a safe place to rest. I like to hide in the bushes of the chaparral habitat or behind the trees of the woodland habitat.

I know that when you visit the Reserve you hope to see some of the animals that live here. You may not see many of us. Most of us are shy and hide when we see or hear you coming. So, how can you find out what animals are here? Well, we leave clues when we use your trails. As you walk along, there are two things to look for. Look on the ground for our footprints called tracks. You might also see little piles we left behind of things we ate and didn't digest. You call it poop, but do you know what it is called by scientists? Scat!

People have always used the clues we leave behind to find us. Long ago, Native Americans used to live on the Plateau. They hunted deer and other animals for food. They were smart! They followed our tracks and looked for our scat. They made tools to help them hunt. One tool called a bow could shoot sharp things called arrows. When they hunted deer, they would change how they looked by wearing antlers on their heads and fur on their backs. They tried to move like us. We even had a hard time smelling them because they smelled like the plants. They had rubbed sage leaves on their bodies to cover their human smell. We all had to be extra careful. People can still hunt deer in some places today, but not on the Reserve. No one can hunt here. All the animals, not just deer, are protected on the Reserve.

We may be safe from hunters, but there are other predators we have to watch out for. There are the coyotes. They are always looking for a fawn that is away from its mother. They look for old deer that are sick and weak. I don't have to worry about them because I'm almost an adult, and very strong. If they bother me, I'll just kick at them with my sharp hooves and chase them away.

I do have to be extra careful of another predator that lives on the Santa Rosa Plateau. Some call it a cougar. Others call it a puma. In a place called Florida, they call it a panther. Californians like to call it a mountain lion. A mountain lion is a big, strong cat that is very sneaky. It is not as fast as a deer, so it will slowly creep closer and closer. If we look up because we see something moving, it stops! A mountain lion has good camouflage. When it's hiding in the plants, we can't see it. After we go back to eating or drinking, it will try to move closer. It will try and get so close that it only needs one, long, quick jump to catch one of us. Usually we will see it before it gets close enough and run away. Sometimes, one of us gets caught.

I don't really think about it, but predators are helpful. Imagine what would happen if there were no mountain lions. No mountain lions mean many deer. There is only so much food, water, shelter, and space. If there are too many deer, there will not be enough food and water for all of us. Then, many deer and other herbivores will die.

If there are too many deer, there are other problems. We may move off the Reserve looking for food and water and get into people's yards and gardens. When we cross streets there can be terrible accidents if people hit us with cars. Deer also carry tiny animals called ticks. Ticks drink blood and can spread a sickness called Lyme disease to people. These problems have happened in parts of the United States where people killed all the mountain lions. When you think about it, mountain lions are helpful.

Most people never see a mountain lion. But remember, mountain lions are big carnivores. Deer aren't the only animals they eat. They eat coyotes, rabbits, and many animals that live on the Plateau. Even people have to be careful. In the past 100 years, mountain lions have attacked 15 people in other parts of California. The people they attacked were walking, running or biking alone. So remember, always stay with your group on your field trip and stay with an adult when you come back another day.

If you are lucky and see a mountain lion, stand still and make yourself look as big as you can. Don't run. Make a lot of noise. Then the mountain lion won't think you are something he wants to eat.

Long ago, the deer on the Santa Rosa Plateau had to watch out for the California grizzly bear. It was a very dangerous enemy for the deer and other animals. When people started living in the area, they hunted the grizzly bear for fun and killed it for food and for its fur. Soon there were no more grizzly bears in all of California. Have you seen the bear on the California flag? That is the only place you will ever see a California grizzly bear.

We deer have been living on the Santa Rosa Plateau for many thousands of years. Our ancestors roamed the area's ancient grasslands with antelope. They found shade in long-ago woodlands with mastodons, saber-toothed cats, and dire wolves. Native Americans hunted us. Deer, and all the animals that are protected on the Reserve, are survivors. That means we are still living today even if life has not always been easy for us. We can't live in cities. That's your home. We need places where people don't live--places like the Santa Rosa Plateau Ecological Reserve. In 1984, people started protecting some of the land on the Plateau for the animals and plants. Because people bought the land and set it aside for us, we can continue surviving into the future. The Santa Rosa Plateau Ecological Reserve is not a zoo. There are no cages. We can go anywhere we want on the Reserve looking for what we need. Because we are protected, we are here for you, to see and enjoy, whenever you visit the Reserve, now and in the future.

See you soon.

A Mule Deer