

TEACHER GUIDE: Letter 1: Western Pond Turtle

CONCEPTS COVERED

Plant Community-- Riparian or stream wetland

Characteristics

Tenajas

Representative animal--Western pond turtle

Characteristics

Food

Reproduction

Enemies

Surviving drought

Predator/prey

Omnivore

Cold blooded/Warm blooded

Vernal pools vs tenajas

Reserve history--

Vail Ranch

Protecting the Reserve and the animals that live there—

Stay on trails

Leave animals in their homes

Don't release pets into the wild

CONTENT VOCABULARY

camouflage—special coloring and shape that helps an animal blend in with its surroundings

cold-blooded—an animal's blood and body temperature changes with the temperature of the air or water around it

Ecological Reserve—a place that people set aside to protect the plants and animals that live there

endangered—a title given to plants and animals when their population reaches a low number of individuals, and they are in danger of extinction

extinct—when a plant or animal species can no longer be found existing or living on the Earth

fossil—a remnant or impression of a plant or animal that lived long ago; usually found in rock

habitat—the area or natural environment in which an animal or plant normally lives or grows

omnivore—an animal that eats both plants and animals

plateau—a large, raised area of land having a relatively flat surface

predator—an animal that hunts for, catches, and eats other animals

prey—an animal that is hunted, caught, and eaten by other animals

reptile—a member of the class of cold-blooded vertebrate animals with dry scales or hard plates on its skin; most lay eggs with soft leathery shell; e.g. lizards, snakes, and turtles

riparian or **stream wetland**—a habitat that has moving water, like a stream or river, at least part of the year

species of special concern—a species of plant or animal whose numbers are shrinking

tenaja—a deep, rock-lined streambed pool which often holds water year-round

vernal pool—seasonally filled pools of water in shallow depressions of grassland on the Plateau

warm-blooded—animals whose body temperatures remain constant regardless of the external temperature

OTHER WORDS TO KNOW

ancestors	fresh water	relatives
bank (of the creek)	illegal	rib cage
female / male	protect	shore

THINGS TO THINK ABOUT

What is a habitat?

What is the name of the habitat where you will find the Western pond turtle?

Why might it be hard to see a Western pond turtle when you visit the Reserve?

Can you think of at least 3 things you learned about the Western pond turtle?

Name two ways Western pond turtles protect themselves from predators.

What enemies do Western pond turtles have on the Reserve?

What do the turtles do when there is a drought and the tenajas dry up?

Western pond turtles are a species of special concern. What does that mean?

What can you do to help protect the Western pond turtle?

What do omnivores eat?

What is the difference between an animal that is a predator and an animal that is prey?

Could an animal be both predator and prey? Name at least one.

What does it mean if an animal is cold-blooded? Warm-blooded? Which are you? How do you know?

What is a tenaja?

What animals besides turtles live in the tenajas?

The Santa Rosa Plateau Ecological Reserve was once part of a large ranch. What was the name of the ranch?

What can you do to help take care of the plants and animals that live on the Reserve?

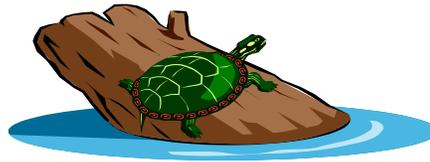
FOLLOW-UP ACTIVITY FOR STUDENTS

After reading the letter, draw a picture of a Western pond turtle in its habitat on the Reserve. Include as many details as possible from your reading. When you visit the Reserve, see how close your picture was to the real thing.

Play “Quick Frozen Critters” created by Project Wild, 1992 Council for Environ. Education



Dear Third Graders,



Hello! I understand that you will be coming to the Santa Rosa Plateau Ecological Reserve very soon. I know you will have a wonderful time and learn many new things while you are here. To help you get ready for your visit, some of my friends and I wanted to write to you and tell you a little about the Plateau and the animals that live here.

I am a western pond turtle, and if you are very, very lucky, you may see me or one of my brothers or sisters. Why would you have to be lucky? Well, we are hard to see because we make our home in the water. We can stay under water for a long time because we can hold our breath for longer than 10 minutes. Can you hold your breath that long? Try it. Time yourself and see how long you can hold your breath.

It is true that I can climb out of the water onto rocks or even the shore with the help of my long, strong claws, but most of the time, I stay under the water where I am safe. We turtles have to be very careful because many animals here on the Plateau would like to have us for dinner--animals like coyotes, gray foxes, and weasels. These animals are called predators because they hunt other animals for food. Turtles and the other animals they hunt are called their prey.

Did you know that turtles are predators as well as prey? We hunt and eat insects, worms and dead frogs. But, we eat plants, too. We are omnivores just like you! An omnivore eats both plants and animals. Would you like a nice, juicy, dead frog? Didn't think so.

If a predator is able to sneak up on me when I am out of the water, I have another way to protect myself. Do you know what that is? You're right. I can pull my head, legs, and tail inside my shell. Did you know that my shell is really my ribcage? Anyway, when I am inside my shell it is hard for those predators to eat me.

Yes, I do come out of the water sometimes. I like to sit on a rock or the bank of the creek in the sun. That's when you might see me. Sitting in the sun warms me up so I can move faster. You see I am a reptile. Reptiles are what is called cold-blooded. You are warm-blooded. Your body is always the same warm temperature--about 98.6°F--but my body is the same temperature as the air or water around me. If the air is cold, I am cold. If the water is cold, I am cold. When I am cold, I move. veryvery sloooowwwly. Sometimes that's o.k., but sometimes I need to find food or move quickly. Then I need the sun to warm me. Like you, I get vitamin D from the sun to help keep me healthy. The sunlight also kills any germs I might have on my body that could make me sick.

Another reason that some turtles leave the water is to lay eggs. At night, when it is hard for predators to see them, female turtles climb out of the water onto the land. They may crawl as far as 100 meters. That's about as long as a football field! Then they dig a shallow hole with their strong claws. Let me tell you, it is hard work! After they dig the hole, they will lay about 6 eggs in it. Then they put some dirt over the hole and cover it with leaves and anything else they can find to camouflage, or hide, the nest. When they finish, they crawl back to their home in the water.

After the eggs hatch, the baby turtles will spend some time growing in the nest hole. Then they will come out and try to get to the nearby water. Most of them won't make it. Many animals eat baby turtles. Birds, coyotes, foxes, and even big frogs will be looking for them.

Another big danger for baby turtles is people. When people walk off the trail on a visit to the Santa Rosa Plateau Ecological Reserve, they can step on a nest. They can crush the eggs and babies hiding in the shallow hole. So please, when visiting the Reserve, stay on the trail. That will protect the nests and my habitat.

A habitat is the place you live. It has everything you need-- food, water, air, and a place to feel safe. It is like your house and your neighborhood. The habitat I live in is the riparian (ri-pear-ee-an) or stream wetland. The riparian wetland habitat is one of four habitats that you will see when you visit the Santa Rosa Plateau Ecological Reserve. A riparian wetland habitat has moving water like a river or stream. In the winter and spring when it rains, the streams of the Santa Rosa Plateau are loud and fast with a lot of water. I like that because I can swim up and down the streams looking for food and friends.

The rest of the year, the streams are quiet and almost dry. Then I have to stay in one of the pools along the streams called a tenaja (ten-ah-ha). A tenaja is a deeper part of a stream that can have water in a pool all year. Most of the time, tenajas have enough water for water animals like me to live through the dry summer months. Frogs, salamander-like newts, water beetles, dragonfly larvae, diving bugs, and water striders are just a few of the many animals that share the water of a tenaja with me. Boy, does it get crowded! There are no fish. Tenajas do not hold enough water and oxygen for them to live.

Water animals aren't the only animals that need the tenajas in the summer. Sometimes when I'm out sunning myself, I see all kinds of animals coming down to the tenaja to drink. I've seen deer, gray foxes, bobcats, mountain lions, coyotes, and many different kinds of birds coming down to the only place where there is water--our tenajas.

Some years, there is so little rain that all of the water in the tenajas dries up. Some of you might be thinking, "Where do the turtles go when the tenajas dry up?" Good question. Remember those strong claws of mine? I use them to dig deep into the mud of a drying tenaja. After I am buried in the mud, I kind of go to sleep. I will stay there and wait for the rains to fall and the streams to flow again. "What about the other animals?" you ask. Well, long droughts are very hard on animals, and many of them will die.

There are other pools on the Reserve, but you won't see them on your trip. They are called vernal, or springtime, pools. Vernal pools are different than tenajas. Winter rains fill up these shallow pools. They will last through most of the spring, but they will be dry by summer. You won't find any turtles there, but there are many other things to see. Our vernal pools are found on the higher ground of the Plateau where lava once flowed. If you come in the spring with your family, you can take them to visit these interesting pools.

Most of you have heard of my close relatives--sea turtles and snapping turtles. I am California's only native freshwater turtle. Western pond turtles have lived in this part of North America for thousands of years. As a matter of fact, fossils of my ancestors have been found in the La Brea Tar Pits in Los Angeles next to saber-toothed cats and mammoths.

Not only have we been around for a long time, western pond turtles can live for a very long time. In fact, I'm fifty years old! When I was a young turtle, there were cowboys here taking care of Vail Ranch cattle. Vail Ranch was a very big ranch. The city of Temecula, as well as the Plateau, was part of that ranch. The cowboys would come down to the stream to water their horses. Some of them would try to sneak up on me. They would watch me until some movement or noise scared me. Then I would hurry back into the water from my sunning rock or the bank of the creek. There were cattle on this part of the Plateau from 1846 until 1996. That's over 150 years!

Today, there are not many places beside the Santa Rosa Plateau where you can see western pond turtles. People have built homes and other buildings in, or near, wetland habitats so we have fewer places to live. In Washington and Oregon we are now endangered, which means there are very, very few of us. One day we may be extinct and you will never be able to see us

again. Many of us are illegally trapped and sold for food or as pets. That doesn't help either. You can help me and other turtles by not taking us from our wetland homes. And, don't let pets, like bullfrogs that eat baby turtles, loose into the wild.

So, please come and enjoy the Santa Rosa Plateau Ecological Reserve. If you hope to see me or my brothers and sisters when you come, you will have to move very slowly and quietly around my wetland habitat. Keep an eye on the rocks and the water's edges where we might be sunning ourselves. Or stay in one spot and watch for our head when we come up for a breath. You may not see us, but we will see you!

Sincerely,
A Western Pond Turtle

P.S. I have sent a picture of myself with this letter.