### Meet the Author



Hello nature explorers! I'm Rex. a golden-mantled ground squirrel. I hope you enjoyed learning about my home. Camp Lassen. I was born here in the summer of 2023. Tragically. I lost my family in the fire that burned down two buildings at camp. I was scared and hungry. I frightened some Cub Scouts visiting camp by climbing up their legs. I was still a kid then and didn't have good manners. Lucky for me. Janna Polik. Abigail Heiss. and the rest of the Camp Lassen staff took care of me. Once all camp was over. I went to Gold Country Wildlife Rescue in Auburn. CA where I was rehabilitated and released in the Tahoe National Forest.

This Nature Guide was compiled by Leah Heiss to fulfill one of her Woodbadge Ticket items.

3-47-24-1

### Rex's



# Camp Lassen Nature Guide

### Welcome to Camp Lassen

My name is Rex. I was born here at Camp Lassen. This is my nature journal. I use it to record my observations of knowledge of the plants and animals I've found during my explorations.

When you turn the page, you will find my first entry — a timeline of Earth. So many of the plants and animals I've recorded are related to the most ancient plants and animals on Earth! So cool!

I recommend that you begin by exploring the Nature Trail and then make your way to the lodge.

I hope you enjoy learning about the nature at Camp Lassen as much as I do.





Can you find any tracks from others in my family?

### Birds & Mammals





No matter the color. all bears seen at Camp Lassen are Black Bears.



### Golden Mantled Ground Squirrel





White Headed Woodpecker

Eats insects and conifer seeds.



This woodpecker forages on the ground for ants and grasshoppers.

#### Mountain Chickadee



This bird's call sounds like "cheeseburger".

### Meadows

Meadows are amazing! They protect us from floods and fires and they filter our water. Keep reading to learn more!

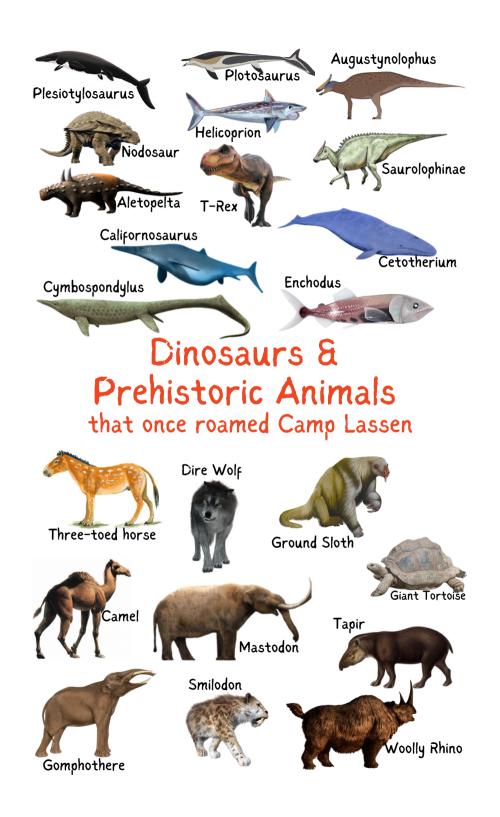


Can you spot a Red Shouldered or Red Tailed Hawk hunting above the meadow?

Meadows are natural sponges and act as Nature's reservoirs. They absorb and store spring snowmelt. slowly releasing that water throughout the dry months of summer into streams and rivers. This slow release of fresh water protects the land from floods. Meadows also act as filters, removing excess pollution as the snowmelt seeps down through the meadow's many layers of soil. Additionally, meadows act as a natural fire break. It's hard for the soaking wet soil of a meadow to catch fire, limiting the spread of wildfires.







### A Brief History... Dates are "years ago" 4.5 Earth forms billion Precambrian Earth cools and billion continents form 2.5 jellyfish appear billion 1 billion Fungus 550 Slugs & Bony Fish million First land animals 500 millipedes & scorpions million 400 million Lichen Paleozoic 350 Ferns & Starfish million 325 First Insects million

### Reptiles & Insects

Scorpion

Stings like a bee, but not deadly. Fluoresces under UV light.

Two-tailed Swallowtail



Millipede
Safe to handle.

Pale Swallowtail

Alligator Lizard

Adorable, but do not handle. These lizards bite and will pee on you.



Sierra Garter Snake

Non-venomous. Safe to handle.



### Plants

# Trillium Medicinal uses include

relief for insect bites and skin irritation.



### Pussypaws

Grows in rocky and sandy soil.



### Starthistle Non-native, invasive



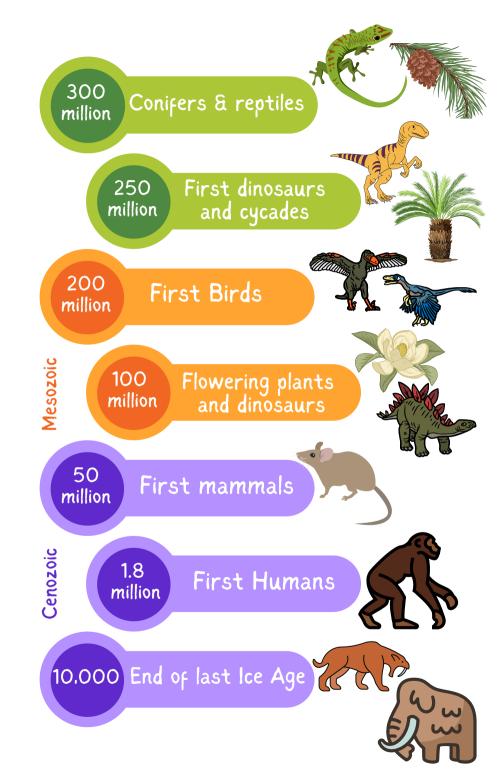
# Gooseberry Edible. but spiky. Abigail says "No eat!"

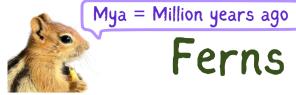


### Red Clover

Medicinal uses include treatment for respiratory illnesses and promotion of bone health.

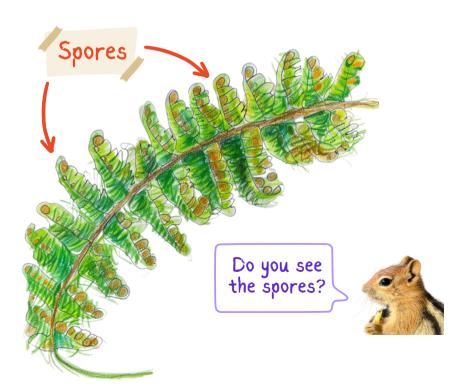






Ferns are one of the oldest plant groups on Earth. They first appeared about 390 Mya — more than 100 million years before dinosaurs roamed the Earth! During the time of the dinosaurs, ferns could grow up to 100' tall.

Ferns reproduce using spores found on the underside of the fronds — they look like small brown dots or stripes. The wind spreads the spores — kind of like when you blow on a fluffy, white dandelion.

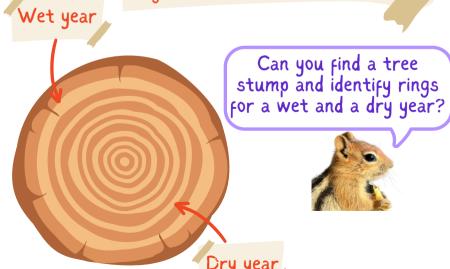


### Ponderosa Pine

Ponderosa pine cones are much smaller than those of the sugar pine. just 3-5" long ... and prickly. Its 5-10" long needles grow in sets of three near the end of its branches. This tree has a straight, thick trunk with broad plates of rusty orange bark and black crevices. Some people say the bark smells like vanilla or butterscotch.

Indigenous peoples used the Ponderosa's long needles to weave baskets.

Did you know that you can measure time and "read" past climate conditions by looking at tree rings? It's called "dendrochronology" -- from ancient Greek "dendron" for tree and "khronos" for time. In wet years, the tree rings are wide. In dry years, the rings are narrow.



## Conifers

Conifers are another ancient plant that first appeared about 310 Mya. They are a bit younger than ferns, but they are the oldest living trees. A conifer's seeds are stored in its cone and pollinated by the wind – no need for bees, birds, or bats! (Which is a good thing, because those didn't exist yet.)

### Sugar Pine

The tallest and most massive pine tree, it also has the largest pine cones (up to 20" long and 2 lbs) of any conifer in the world. Sugar pines are named for their pitch, or sap, which indigenous peoples used as a sweetener and as chewing gum. Sugar Pine seeds are a favorite treat of yellow pine chipmunks. Stellar's jays, and black bears.



### Western Bracken Fern

This fern is also known as the Eagle Fern.

Seems appropriate for a plant at a Scout camp.

don't you think?

This fern likes to grow in rocky soils and are often found in the cracks of rocky outcroppings.

### Narrowleaf Sword Fern

### Western Lady Fern

This fern has bright green. lacy leaves and likes to grow in moist, shady areas, often along streams. They can grow to be 5' tall with a single frond measuring 1' wide and 3' long!





# Douglas Fir

Despite its name. the Douglas Fir is actually a pine tree. Cones are 2-4" long and have distinctive 3-pronged scales sticking out between the cone's primary scales. The indigenous peoples of the area have a myth describing a douglas fir pine cone.

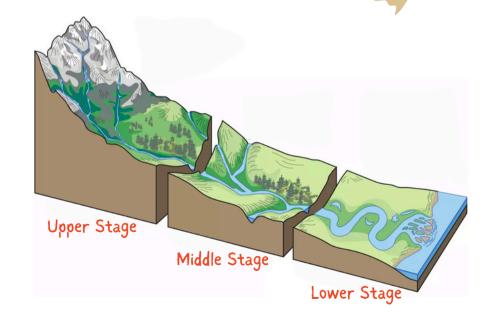
During an especially harsh winter. a mouse took shelter underneath a Douglas fir. where he was protected from the wind and cold. yet he had nothing to eat. The big tree took pity on the mouse and told him to climb to the top of its branches and feast on the seeds inside its cones. The little mouse thrived on these gifts from the fir tree and it wasn't long before the other mice in the forest noticed. They followed him to his food source and started eating, but this angered the tree and it slammed its cones shut, trapping the mice inside. To this day, the legend goes, you can still see their tails sticking out.

Do you see it? The mouse's tail and back legs are right here, sticking out of the pine cone.

What stage is the Big Chico Creek here at Camp Lassen?



A river has three stages: upper, middle, and lower. The upper stage is steep and narrow. The middle stage is less steep and begins to meander. The lower stage is nearly flat and the river spreads out horizontally.





### Rivers & Erosion

Rivers follow the path of least resistance. From their headwaters to their outlets in the sea, they move around rocks and erode valleys.

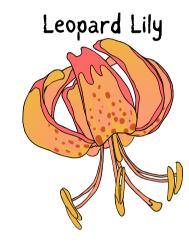
Rivers erode bedrock and sediment by breaking down the surface into small pieces with their fast-moving water, which acts like sandpaper. These pieces, called sediment, are then carried downstream, scraping and digging into the river bed. Over millions of years, this process can greatly change the topography of the land, creating distinct topographic features like valleys and gorges.

As a river flows from higher to lower land, its slope flattens out, causing it to cut less deeply into its bed and instead meander from side to side.

Can you find these along the nature trail?

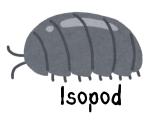














### Lichen

Lichen are "composite organisms" made up of algae and fungi living in a mutually beneficial symbiotic relationship. The fungus provides the structure that attaches to trees and the algae gives the fungus energy from photosynthesis.

### Forked-Tube Lichen

Hollow stemmed, with many branches. White on one side, black on the other. Sometimes have small "cups" on upper branches.



### Wolf Lichen

Bright yellow-green in color. Wolf Lichen resembles curly endive. a kind of lettuce sometimes found in fancy salads. Although curly endive is edible. Wolf Lichen is

toxic and should not be eaten. The name Wolf Lichen was given to the plant because it was often used by ranchers and farmers to kill predators like wolves and foxes. Wolf Lichen grows on living and dead pine trees.

Are you "lichen" the nature trail?

What does lichen feel like?



Indigenous peoples soaked porcupine quills in wolf lichen to dye the quills yellow before weaving them into baskets.



1 R

2 L 3 R

4 L 5 R

6 L 7 R

8 L 9 R

10 L 10 R

9 L 8 R

7 L 6 R

5 L 4 R

3 L 2 R

1 L