

Instructions for Becoming a Junior Ranger

To become a Junior Ranger you must earn badge points. Look below to see how many badge points you will need. Keep track of your badge points in the space below by putting a line through the badge, like this .



(1 badge point)
(2 badge points)
(3 badge points)

Redwood



Ages 10-12 (Grades 4th-6th) must earn 16 badge points or more





Redwood





Redwood

Ages 13 and over must earn 24 badge points or more



A Search for Junior Ranger Safety

Welcome to Redwood National and State Parks. There is so much to see and do here! We know that you are excited to get started, but to be a Junior Ranger you must always be safe!

Earn badge points by filling in the missing letters in the Highlighted words below and then find those words in the Word Search.



Word Search

L	R	F	Т	R	Α	I	L	Α	U
W	0	G	R	Ι	С	Κ	F	Ν	Η
Α	J	W	D	Υ	0	R	Ε	Ι	Ι
V	Ε	Α	Q	S	Α	F	Ε	Μ	G
Ε	W	Т	S	L	Т	Ρ	D	Α	Η
S	L	Ε	Α	۷	Ε	S	V	L	Κ
Ν	Ρ	R	Η		Κ	Ε	Η	S	Κ
W	Ι	L	D	L	Ι	F	Ε	Μ	Χ

Poison Oak



Look out for this plant! It can cause an itchy rash if you touch it. Here is a little rhyme to keep you safe:

If you find a plant with LEA ____ S of 3, stay S __ FE and let it be....it's trying to tell you, "don't touch me!"

The Redwood Puzzle

Coast redwoods are amazing trees but we have more than just tall trees in these parks. A habitat is a special home for a plant or animal. An old-growth forest is just one kind of habitat within these parks. Like pieces of a puzzle, when you put them all together, you get **Redwood National and State Parks**!

Earn 2 badge points by drawing a line from the habitat to the correct puzzle piece.

Old-growth Coast Redwood Forest Trees that can grow over 350 feet high and live over 2,000 years!

Oak Woodlands

Mountain prairies. Open grass lands with oak trees. Fire keeps the meadows open for wildlife.

Ocean The Pacific. The Big Blue! Beaches, whales, birds, sea lions, tide pools!

Prairies Open grassy areas with no trees. Elk, deer, mountain lion, hawks, and mice all call this place home.

> **Rivers and Streams** Fresh clean water running to the ocean. All living things need water to survive.

Be a Wildlife Detective

As you explore the habitats of Redwood National and State Parks, you will discover some amazing things! You might not always see the wildlife you wanted to see...but you can find clues that wildlife has left behind.

Find 5 wildlife clues in the parks and earn 3 badge points.

Remember: Junior Rangers always leave things where they find them (except for litter..we pick that up!)



Tide Pool Bingo

Have you ever seen the rocky ocean floor when the tide goes out? We call this habitat a tide pool. Take a walk on the beach and discover the amazing tide pools of Redwood National and State Parks! **Safety first! Before you go, earn your safety badge points on page 2.**

Earn 3 badge points by identifying at least 4 things that live in the tide pool habitat.

Remember: 1. Always explore the beach with an adult.

- 2. Never turn your back to the ocean.
- 3. Watch out for big waves.
- 4. Know the times of high and low tides.



Ranger Beach Report

Earn 3 badge points by filling out the Redwood National and State Parks beach report. Take a walk on the beach and look, listen, and feel for the current conditions. Return your observations to the daily weather information.

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Date: Location:		Tim	e:
Fog	Waves	Weather	Temperature
Special Ok	oservations:		°F °C 100°-1111 90°-1111 30° 10° 10° 10° 10° 10° 10° 10° 1

Be a Tree Detective

Coast redwood trees can live to be over 2,000 years old! How do we know this? Scientists once counted over 2,000 growth rings on a single tree. The light rings are the seasons when the tree grew fast and dark rings are the seasons when the tree grew slow. Take a hike in the old-growth and look for clues to help you with this activity.

How old is this tree? About years old.

What do you think caused the black marks on the tree?

Ranger Tip

1 light growth ring 1 dark growth ring **1 dark growth ring**

About how old was the tree when the black marks happened?

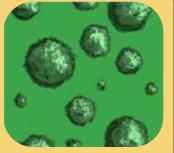
and

Future Forests

Did you know only a third of the forests here are healthy old-growth redwood forests? Park rangers are learning how to restore forests damaged by logging. Our efforts in the park today will create healthier forests for future generations to enjoy.

Below are examples of three different forest conditions you can find in the parks. Draw a line from the tree ring samples to the forest type they grew in. Hint: Tree ring spacing can reveal how much sun the tree has received.

Old-Growth



- Forest has never been harvested.
- Fewer trees spaced out allows sunlight to reach the forest floor.
- Has tallest, biggest, and oldest trees.

Second-Growth



- Forest was harvested and seeds were planted.
- Trees are closer together so less sunlight reaches the ground.
- Young trees grow slower as they fight for light.

Restored

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- Many young and crowded trees were removed.
- Remaining young trees have space and light to grow tall and wide.
- On the way to again look like old-growth.





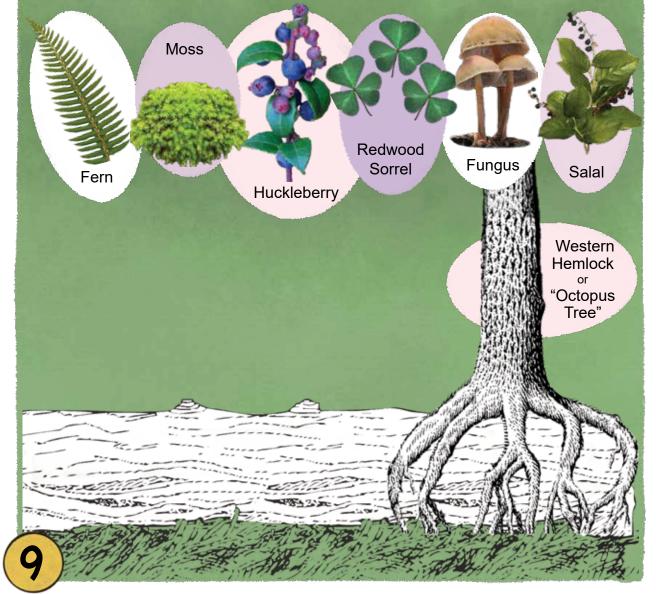
Earn 1 badge point by telling a ranger which forest conditions you saw. Where were you when you saw old-growth forest? Did you see any second-growth?

The Nursery Log

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Shhhh...our forest babies are growing! A nursery log is a tree that has fallen over and is now a new home for baby plants. A nursery log, like a nursery for human babies, has all the nutrients to help baby plants grow.

Find a nursery log in the old-growth redwood forest and draw all the things you find growing on it. Use the photos below to help identify what you find.



The Octopus Tree Mystery

Junior Ranger Solves Octopus Tree Mystery!

Now that you learned about nursery logs (on page 9), you have the knowledge to solve a mystery. An octopus tree stands on its roots ... and its roots look kind of like an octopus! Most trees keep their roots hidden underground but something made this octopus tree (a Western Hemlock) grow this way.

Earn 2 badge points and get your name in the paper by solving the Octopus Tree Mystery. Explain why the Octopus Tree grows like it does.

The Octopus Tree mystery has been

solved! Here is how it works:

The Art of Making Things

Long before the rest of the world knew about redwood trees, American Indians like the **Yurok** and **Tolowa** were living, working, and playing underneath these giant trees, and still live here today. During your visit, look for the art, history, and culture of American Indian people.

Making things by hand takes time. It can take as much as two years for a person to collect, clean, and organize all the different plants to weave a single basket. A lot of care and thought is put into making traditional arts, tools, and homes.

Basket Design

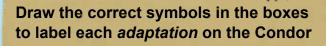
Design and color your own basket. Create a design that means something to you. Take your time and plan your work.



Return of the Condor

California Condors were close to extinction. Through science and conservation efforts, they will soon take to our skies.

Condors are a type of vulture. They do not hunt or attack their prey, so they must rely on dead animals for food.





Bald Head - easy to clean after a messy meal

Wings - are strong and help them fly over 100 miles a day

Beak- strong for tearing into tough hides

Crop - a pouch where the condor can store food

Ruff - a scarf of feathers helps warm and cool their bald heads

Eyes - help the condor see food as it soars high in the sky



Problems in Paradise

These incredibly curious condors often mistake *micro-trash* for food, which can make them very sick. Look out for trash in the park! If you can, safely remove it with the help from an adult.

Take a picture with your trash collection and show it to a ranger for 2 badge points!

Micro-trash can be bits of plastic, glass, or metal.



Hidden Life on the Edge

We have a great wildlife tip for you: look for wildlife on the edge of the forest. Earn 2 badge points by discovering the hidden wildlife in the coloring sheet. Find a northern spotted owl, banana slug, bobcat, black bear, flying squirrel, pileated woodpecker, striped skunk, Pacific wren, and wandering salamander.

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Fish for The Right Color

Salmon are amazing fish that travel between freshwater streams and the salty ocean! Salmon change their coloring for survival, adapting to their environment. **Earn 2 badge points by coloring each fish according to their location.**

This salmon is in the ocean. Dark colors on top and light colors on bottom help them to camouflage from predators both above and below them.

This salmon is ready to head up their native stream to reprouce. Their bright colors are used to attract a mate.

Chinook Salmon

Coho Salmon

How a Tree Works

Just like your bike or your computer, trees have different parts that do different jobs. Earn badge points by learning the parts of a tree and what jobs they do. Then, solve the crossword puzzle below.

Outer Bark- A protective jacket

Inner Bark- Moves food

Cambium- The growing layer

Sapwood- Moves water

Heartwood- Strongest part of the tree that helps the tree grow straight and tall

Tree Illustration Courtesy of International Paper

3

Across

- 1. The growing part
- 2. A tree's protective jacket
- The strongest part

Down

- 4. The part that moves food
- 5. The part that moves water

Timber Time

Did you know that about 95% of the original coast redwood forest was cut down? That means for every 100 coast redwood trees, 95 were used to make things.

A great question to ask a ranger is, "What makes the wood in the coast redwood trees so special?" Earn 2 badge points by finding 5 things made out of redwood in Redwood National and State Parks. Write or draw what you find on the notes below. Then, be ready to talk with a ranger about why redwood is some of the best wood on earth!

Tree Illustration Courtesy of International Paper

How Can You Help?

O

<u>by</u>

them

food

food lockers.

-t+d

Did you know that human food and garbage can hurt wildlife? Keeping our parks clean and safe is important! Earn three badge points by decoding the secret message to find out what you can do to help wildlife in Redwood National and State Parks. Some of the pictures make the sound of the word. You may also have to subtract (-) or add (+) letters to the word.

wildlife

-t+ding

and

y +ep

Stump the Ranger

Find an animal—any animal—anywhere in the parks. Fill out the "Stump the Ranger" form and head to a visitor center. Read the form to the ranger (but don't tell the ranger what you saw!). The ranger can ask you 3 questions and gets 1 guess. You get 3 badge points whether they guess it right or wrong!

Redwood Nous	
Redwood National and State Stump The Ranger Form	Parks
The Kanger Lorn	

Time:

Secret animal you saw:

Date:

Redwood Habitat:

Location:

Ranger Question #1:

Ranger Question #2:

Ranger Question #3:

Ranger's Guess:



Redwood History Explorer

Are you ready to explore some of our local history? A historian learns about the past and shares it with others.

Earn 3 badge points by exploring the places on the map and solving the riddles of Redwood National and State Parks history.

Today I'm a pond with rushes and reeds. Years ago, this is not what you'd see. I was once a place full of floating trees!

What am I?



Creek Trail DeMa Overlook Wilson Cre Klamath Co Lagoon Creel A A

Ranger Tip

Look for signs and plaques that

explain the history

of the area.

I was built to keep America safe from harm. Inside...soldiers, concrete, arms... Outside...chicken, goats, house on a farm.

What am I?

I am cliffs of gold, Made of stream beds old, Old, OLD! Ohh...the treasures I still hold!

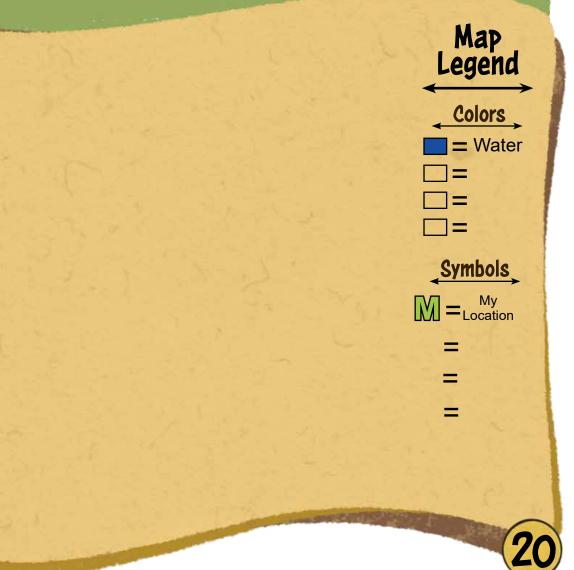
What am I?



Map Maker

A cartographer is a person who makes maps. They share their maps and their favorite places so that everyone can explore Redwood National and State Parks.

For 3 badge points, make a map of a special place that you visited today. Take your time. Include colors and symbols on you map. When you get home, share your map with a friend.





Banana Slug Slide

Hey Junior Ranger...I'm D.J. Slime Listen up close to my banana slug rhyme

Get badge points...through song and moves In front of a ranger...show your groove

Put one for on the other...cause you only got one Yeah, you look crazy...but you know it's fun

With your feet as one...get ready to go Shake it left or right...move heel to toe

Throw your tenter (arms) in the air and wave your good-byes Make your hands in tight fists and call'em your eyes

Now look at your behind and don't be smug It's not what you think...it's just your mucus plug

Foot

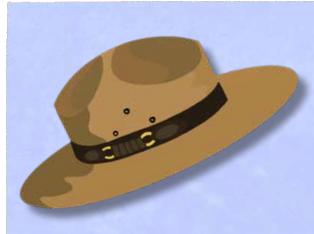
People are wondering if your brain is fried But you just say, "Nope...I'm doing the banana slug slide!"

Mucus Plug

Eyes

Tentacles

Breathing Hole



Be a Junior Ranger at other parks!

There are more junior range programs with the National Park Service and California State Parks! www.nps.gov/webrangers www.nps.gov/kids/ www.parks.ca.gov/?page_id=22783

Bring YOUR class to the redwoods!

www.nps.gov/redw/forteachers/index.htm

Great books & gifts

can be found on our partner's online store! www.redwoodparksconservancy.org

Check us out online!

Vidoes, photos, and park information can be found on our park website and social media platforms. www.nps.gov/REDW

f O flickr

Ask a park ranger!

Do you have questions for a ranger? Looking for help with your school project?

Email us at redw_information@nps.gov

Call us at (707) 464-6101

Or mail a letter to Write a Ranger 1111 Second Street Crescent City, CA 95531



OD JR. RANGER Jr. Ranger Certificate

This certifies that has earned enough badge points and is now an official **Redwood Junior Ranger!**

Sworn in by Ranger

Jr. Ranger Pledge

I am a Redwood Ranger! My badge points I did earn. I learned a lot from this special place but there is still so much to learn.

I am a Redwood Ranger! My job is never done. I promise to keep on learning and share it with everyone.

Teamwork



Working as a team, California State Parks and the National Park Service created the Redwood Junior Ranger program. Printing was made possible by the generosity of Redwood Parks Conservancy.