



**NATIONAL  
CONSERVATION  
LANDS**

Explore the Habitat and Home of the

# Headwaters Forest Reserve

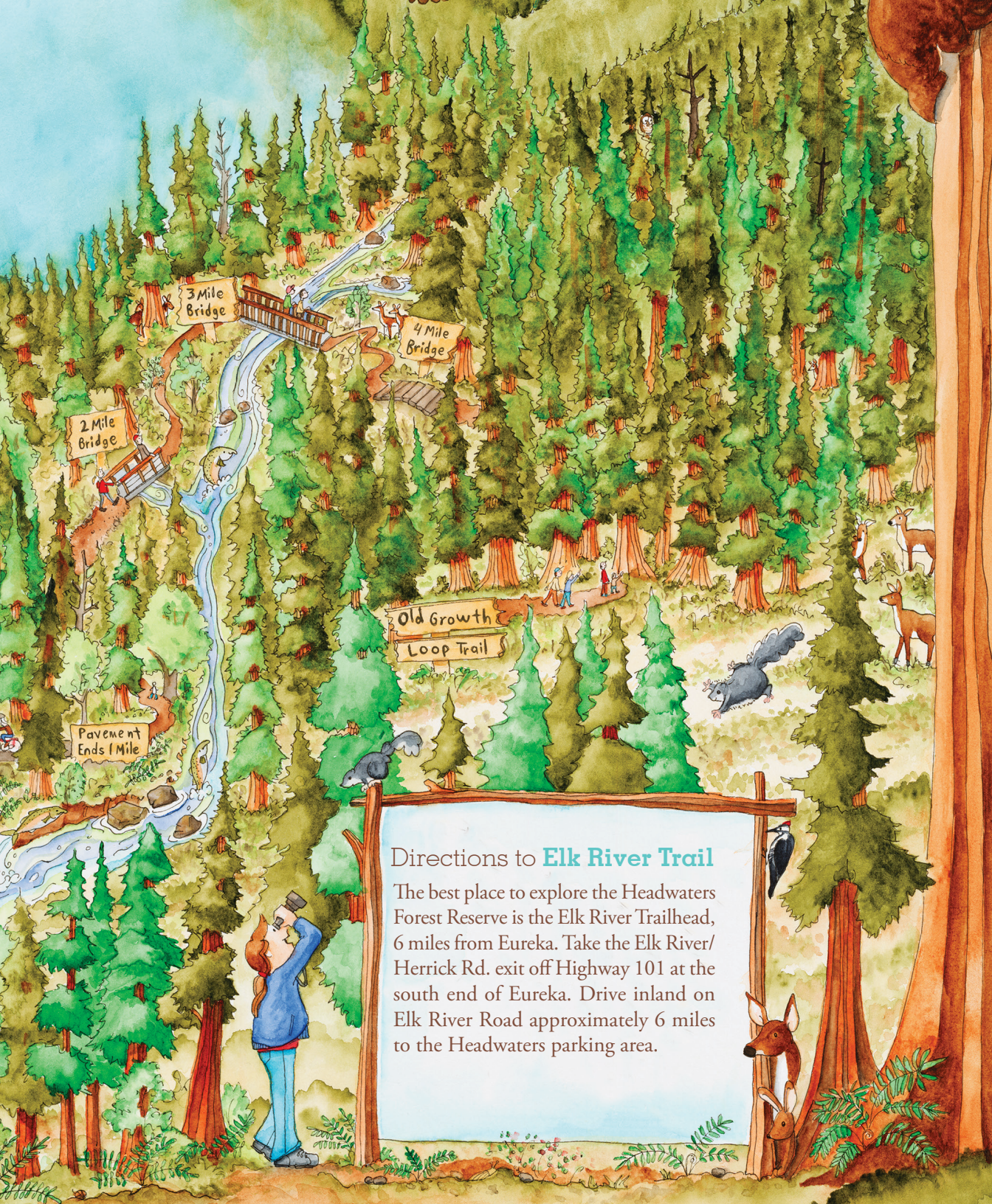
Junior Ranger Activity Book











## Directions to **Elk River Trail**

The best place to explore the Headwaters Forest Reserve is the Elk River Trailhead, 6 miles from Eureka. Take the Elk River/Herrick Rd. exit off Highway 101 at the south end of Eureka. Drive inland on Elk River Road approximately 6 miles to the Headwaters parking area.



## Welcome, Junior Ranger!

The activities in this book will help you explore the Headwaters Forest Reserve's (Headwaters) history and natural wonders. Headwaters was set aside by Congress and the President in 1999 to protect old-growth redwoods that provide habitat for threatened and endangered species such as the northern spotted owl, marbled murrelet and coho salmon. You would be lucky to see these species, but are more likely to see a winter wren, hear the high pitched sound of a varied thrush or watch a garter snake basking in the sunlight.

Work through the activities on your own or ask a brother or sister, friend, parent or adult you know to join you. You can also record your observations on the journal page.

Say the Junior Ranger pledge on Page 29, sign the certificate, and you're on your way to exploring and caring for America's public lands. Have fun!

## This Activity Book Belongs To:

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### What is a Junior Ranger?

- Junior Rangers explore the environment around them
- Junior Rangers care for plants, animals and the land
- Junior Rangers encourage others to care for the land and its inhabitants





## Public Lands Belong To You!

The Bureau of Land Management (BLM) is a federal government agency that takes care of more than 245 million acres of land. Most of these lands are in the western part of the United States. These public lands belong to all Americans.

The BLM manages public lands for many uses such as recreation, supplying natural resources like minerals, providing rangeland where cattle graze, maintaining natural wildlife habitat, and studying history and science.



Headwaters Education Center, Elk River Trail



# How HEADWATERS Got Its Name

It all begins with me, a drop of water hitting the ground, joining other drops of water until they meet and form the Elk River.



Deep in the heart of the Headwaters old-growth forest is the beginning, “head” of Elk River. That’s how “Headwaters” got its name!



As I journey through the valley, I provide water for the residents, animals and vegetable gardens.



I move across the land and pick up sediments, minerals and pollutants. These end up in our waterways. Good neighbors treat the land with care, making Elk River a clean and healthy river.



I leave Elk River and find myself in Humboldt Bay, traveling over plants like pickleweed and saltgrass.



The ocean is the end of my journey, where I mix with thousands of other water droplets. I may also be lifted up by the clouds in evaporation, only to be deposited as a rain drop once again.



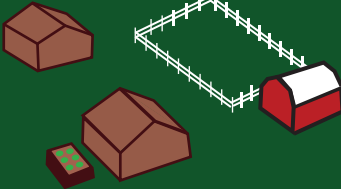
Humboldt Bay

Humboldt Bay

Pacific Ocean



Where does your drinking water come from?





# Welcome to the HEADWATERS QUEST

A “Quest” is a treasure hunt. This treasure might be a wetland, town, forest or perhaps the remnants of human activity (mill site, house foundation, etc.)

Discover the habitat and home of Headwaters, its past residents, creatures great and small. The town of Falk now lies beneath the bushes and brambles. Travel back in time to the 1880s when this lumber town flourished.

There are 10 stops on this quest. For each stop, your activity guide contains two clues and two questions. Write down the answer to the first question and check your answer at the BLM Arcata Field Office for a special prize. Check your answer to the second question at the back of this book.

## QUEST STATS

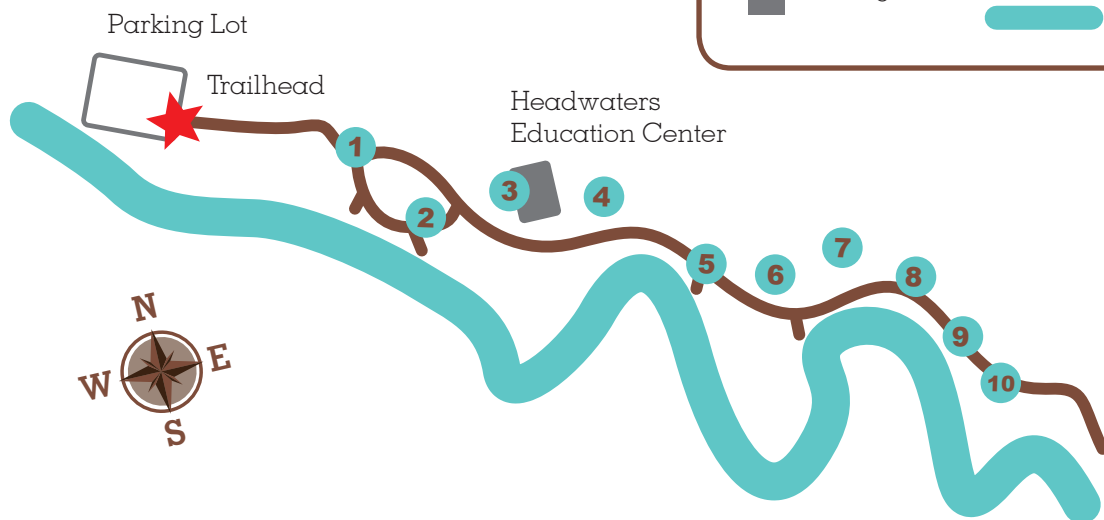
- Length:** 1 mile  
**Time:** 1 hour  
**Begins:** .25 mile down Elk River trail—  
gravel path to the right.  
**Ends:** At the end of the pavement.

## Do you want to do a QUEST?

The Headwaters Quest starts a quarter mile down the trail from the Elk River Trailhead parking lot. There you will see a box marked “Quest”. Follow the gravel path to the right and discover the clues and treasures with delight.

## Legend

- 0 Stop number
- Trail
- Building
- Elk River





## Quest Instructions



The light print are movement clues



The bold print are learning clues



### STOP 1



Creatures and people called this place home. Discover their habitat where the fir trees grow. Veer right down this gravel trail, walk into the shade. Take 50 GIANT steps, look left and high to the nest that was made.



**See that pile of debris in the notch of the tree? Why that's a home but not for you and me. Far overhead a spotted owl hovers, while a little wood rat burrows for cover.**

### STOP 2



Wind your way through the woods, skip past the path to the right. Follow the hill past the hairpin, listen to river sounds delight. Take a right turn and behold Elk River in sight.



**Now look for signs old and new. To your left a chicken coop, ahead the salmon cycle renewed. In the river, salmon and steelhead make a nursery called the "redd". When the fish mature, wildlife will be fed. What was once the backyard of Loleta and Charlie Webb, is now a web of life where the habitat gets ahead.**

### STOP 3



Backtrack to the path and then turn right, prepare your feet for a rather short hike. Look back in time, many years back, imagine the click clack of trains on the track. Merge right on the main trail, walk an 1/8 of a mile. Keep an eye out for a Train Barn, go ahead and stop for a while.



**This restored barn once housed a train. Over the decades it has weathered wind and rain. In 1937, the mill shut down, its residents up and left the town. For years this building stood deserted and forlorn. Within someone's mind an idea was born: "Let's move it and make it a learning place, for all who wish to share this space." The barn is again new, inside the Falk stories accrue.**



Dusky Footed Wood Rat



Loleta and Charlie Webb



Train Barn





# QUEST-TIONS

## CHECK YOUR ANSWERS

(AFO) = Check answers at the BLM Arcata Field Office

(AK) = Check answers at the back of this booklet



### QUESTIONS FOR STOP #1

1. How many wood rat nests did you see on your fifty giant steps? \_\_\_\_\_ (AFO)
2. Look at the forest floor, name the cone that fell from the wood rat's tree. \_\_\_\_\_ (AK)



### QUESTIONS FOR STOP #2

1. What signs do you see of human activity? \_\_\_\_\_ (AFO)
2. What do down logs provide for salmon? \_\_\_\_\_ (AK)



### QUESTIONS FOR STOP #3

1. Go towards the sand shack, look at the signs and find out where this barn once stood. \_\_\_\_\_ (AFO)
2. Look at the sign in the sand shack. Where did the sand come from? \_\_\_\_\_ (AK)



#### STOP 4



Walk further upstream with the river on your right, through a wooded area that blocks the sunlight. Look to your left and to your right, point to stumps within your sight. Notice the stumps on both sides of you; notice the sprouts on them, both old and new. Pause at the sign on your left hand side, notice the burl drawing it provides.



**Burl is for the new sprouts to unfurl. These sprouts tell a story all of their own; each one is a tree clone. A perfect copy of a mature redwood tree, though it will be many years before we can see it.**



Burl Tissue

#### STOP 5



From the redwood stump where new sprouts nestle, walk 1/8 mile down the trail past the picnic bench, toward the site of an old train trestle. Sit on the bench by the trail, look up river to see evidence of a rail.



**The train moved logs to the mill and lumber to the bay, returning to Falk at the end of the day. Train logging gave way to tractors and trucks, gravel roads replaced rails to move logs to the mill.**



Falk Gypsy

#### STOP 6



Look to your left as you walk up the trail, you may see an old logging road on the side of the hill. Continue until the trail makes a bend that is dramatic. You can view a drainage cleared of silt, making salmon quite ecstatic.



**In the early 1900s trains used tall bridges or trestles to avoid winter muck. By the 1920s, the piles of dirt and wood that you see supported the weight of logging trucks. These “Humboldt Crossings” filled the river with dirt. For spawning salmon, muddy water can hurt. In order to correct a harsh situation, the “Humboldt Crossing” was removed by tractor excavation. The drainages are now restored to their natural shape, increasing spawning salmon’s landscape.**



Elk River





# QUEST-TIONS



## QUESTIONS FOR STOP #4

1. Look as far as your eyes can see, how many stumps with sprouts do you see? \_\_\_\_\_ (AFO)
2. Look for evidence on the stump behind the sign of springboard notches. How many do you see? \_\_\_\_\_ (AK)



## QUESTIONS FOR STOP #5

1. At this space look up the river at a tree with no branches and a piece of wood nailed to it. This is part of the train trestle that has fallen down against the bank. Count the milled wood that you see that had been part of this historic rail. \_\_\_\_\_ (AFO)
2. Above the ripples, down below, a nesting habitat grows. What threatened species are born here and find their way to the ocean? \_\_\_\_\_ (AK)



## QUESTIONS FOR STOP #6

1. Look for a prehistoric plant that resembles horsetails. Find its Latin name at the parking lot kiosk and write it in. \_\_\_\_\_ (AFO)
2. Why is it important to restore the watershed after logging. Who does it serve? \_\_\_\_\_ (AK)



## STOP 7



Travel around the bend and up a slight grade, beneath the maple boughs providing cold shade. Continue down the trail, but please don't lag until you reach the prominent snag. You will see a rather tall stump, what used to be a tree, look at all the life growing on it abundantly.



**This snag is covered with plant diversity. Count the species that you can see. Licorice fern, leather fern, huckleberry and salal: These are a few of the plants, but not all. The pale lichen is both an algae and a fungus, rather small compared to the snag that is humongous. Lichen's algae contains chlorophyll, providing photosynthesis. Fungus keeps algae moist, which by itself would shrivel and crisp. This primitive plant species is millions of years old, existing long before the story of Falk could be told.**



Lichen

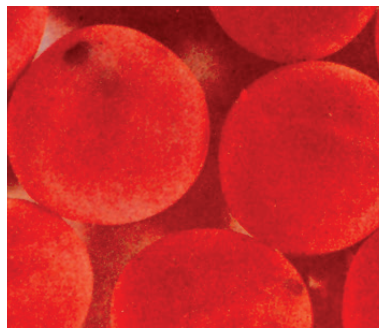
## STOP 8



Go upstream, walk past the green mossy tree. Bigleaf maple is my name, you see. Today we continue on feet where a bend in the river we will soon meet. Peer through the maple branches into the shaded pool, that protects young salmon by keeping the water cool.



**In the dark, murky waters young salmon feed upon insects and spiders that fall from the leaves. Salmon come home to this river from out in the ocean, laying their eggs safely in the river's swift motion.**



Salmon Eggs

## STOP 9



Follow the path once again into history where the forest around you holds a mystery. Stroll through a hundred years in time. Town activity bustled all around you. Above the heads of loggers marbled murrelets (now threatened) once flew. Round the curve and to the left, stop at the sign, see Falk's early years while you rest.



**The blacksmith's home housed a family of four where Evande Miller looked out her door. Over the lumber stacks Evande would peek, at the boys of the town playing hide and go seek.**



Marbled Murrelet

## STOP 10



Take 10 giant steps toward the town of Falk past the sign. Look behind a metal pipe. You should see a treasure box. Sign in, **EXPRESS YOURSELF**, take something and leave something behind.



Town of Falk



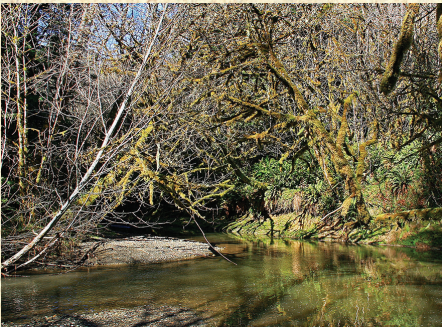


# QUEST-TIONS



## QUESTIONS FOR STOP #7

1. Can you find evidence of a cut on this snag? How far up the tree from its base? \_\_\_\_\_  
\_\_\_\_\_ (AFO)
2. Something happened to this tree to make it a snag. Look for clues on the bark and the top of the snag. What traumatic event happened to this tree? \_\_\_\_\_  
\_\_\_\_\_ (AK)



## QUESTIONS FOR STOP #8

1. Can you see the pile of lumber to your left as you face the sign? What purpose did it serve during the time of Falk? \_\_\_\_\_  
\_\_\_\_\_ (AFO)
2. This is the only place that you can go down to the river on the trail. Why do you think approach is limited? \_\_\_\_\_  
\_\_\_\_\_ (AK)



## QUESTIONS FOR STOP #9

1. One hundred years after Falk, Headwaters is now protected public land. What threatened species was it protected for? \_\_\_\_\_  
\_\_\_\_\_ (AFO)
2. Notice the large metal pipe. Can you find evidence of this pipe in the Falk picture? What building was this a part of? \_\_\_\_\_ (AK)



# STAND UP

**Plant your feet firmly on the ground.**

These are your roots. Wiggle your roots.

**Raise your hands in the air.** Your arms are branches and your hands are leaves. Let your leaves blow in the wind.

**Turn your leaves toward the sun.** Can you feel the warmth? Absorb as much as you can, you have sunbeam catchers in your leaves.

Just like you, trees need clean air. **Take a deep breath and let it out.**

**Spread your leaves wide to catch a raindrop.** Your leaves direct the rain to the soil around your roots. There is also water stored in the soil. **Wiggle your roots to take a drink.**

**Breathe the air, feel the sunlight, drink the water.**

## YOU ARE A TREE!





# NAME THAT TREE!



## NEEDLES



## LEAF

or

Flat, feather  
like needles

Needles circle  
around the stem

Leaf, soft, white,  
velvet underside

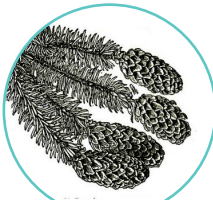
Leaf has  
rough edges



Coastal  
redwood  
*Sequoia  
sempervirens*

Flexible,  
soft  
to the  
touch

Sharp,  
rough  
to the  
touch



Sitka spruce  
*Picea sitchensis*



Douglas-fir  
*Pseudotsuga menziesii*



Sitka willow  
*Salix sitchensis*

Leaves are  
ovate and  
have a  
curl at the  
end

Leaves  
are large  
and have  
five  
lobes



Red alder  
*Alnus rubra*



Bigleaf maple  
*Acer macrophyllum*

Can you find an example of each of these trees?





# THE LONG GONE BUT NOT FORGOTTEN TOWN OF FALK



## What was the town of Falk?

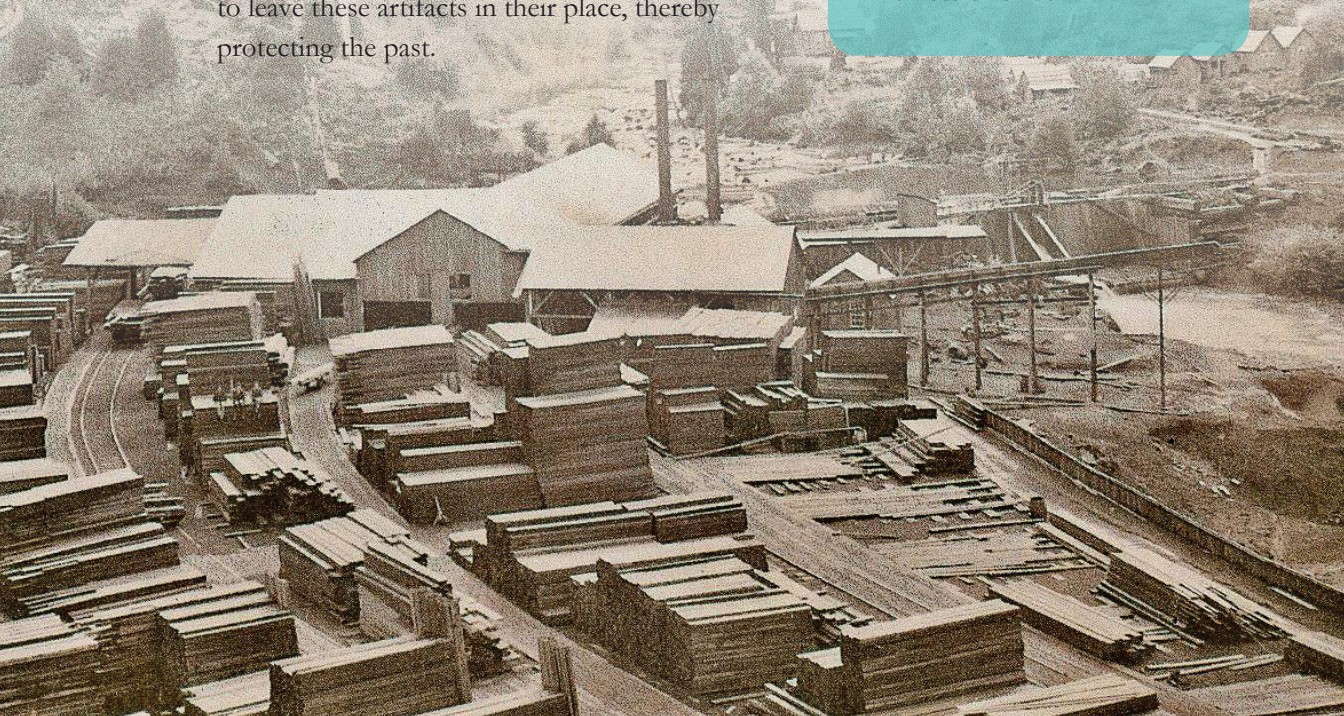
Falk was a mill town from 1884 to 1937, located deep in the heart of the Elk River watershed.

## What happened to the town?

By the 1930s the company couldn't afford to pay its workers and the mill shut down. By the 1970s the buildings were dangerous so the lumber company burned and bulldozed them.

## What's left of the town of Falk?

Archaeologists are putting clues together about the people who once lived in Falk. Scattered in the woods are the remains of old shoes, perfume bottles, tools and dishes. It's important to leave these artifacts in their place, thereby protecting the past.





# — Meet — MAGGIE

## FROM THE LONG GONE TOWN OF FALK



### Who was Maggie?

Maggie was the logging camp cook and much more.

### When was Maggie born?

The picture above was taken approximately in 1911, when Maggie was about 25, making her birth year about 1886. She is on the right in back.

### Where was Maggie from?

Researchers found that Maggie's last name *Biord*, has Dutch origins. Her married name was *McNeill* which is of Irish heritage. During the time Maggie was born, many immigrants came to the U.S. in search of work. A lot of Falk employees were from places like Sweden, Canada, Italy, Ireland and New England, where people had already learned to log trees and had grown used to lumber camps.

### What was a typical day for Maggie?

Maggie got up at 4 a.m. and joined her kitchen crew in making breakfast for the loggers. They made eggs, potatoes, ham, fruit, pancakes, and lots of coffee. After the loggers ate, the kitchen crew carried the big heavy dishes back to the kitchen, washed and dried all of them, and got ready for dinner. Maggie loved making desserts; sometimes 30 to 40 pies at a time.



BLM and Humboldt State students conducted an archaeological field study at Maggie's camp. This may have been Maggie's alarm clock.



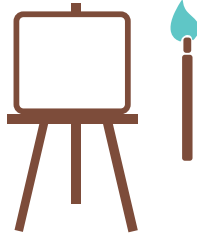


# THE PAST: CAN YOU DIG IT?

Archaeologists are specially trained to uncover clues to human history. Like a book, archaeology tells a story. Artifacts left behind by those that came before us provide the pages of the book. Removing artifacts from public land is like tearing out pages of a book, removing that piece of the story forever. By keeping the archaeological site intact, you and future generations can enjoy the story again and again. Look at the pictures below and circle those actions that you can take to protect clues to America's past. Draw an X through actions that would harm those clues.



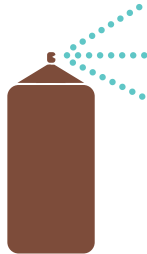
Draw graffiti



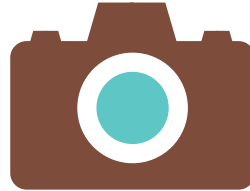
Paint a picture



Write a story



Spray paint



Take a photo



Bike across



Walk on walls



Take objects home



# MAGIC WINDOWS

- 1 Raise your hands.
- 2 Put your thumbs and pointer fingers together.
- 3 Draw three things that you see.

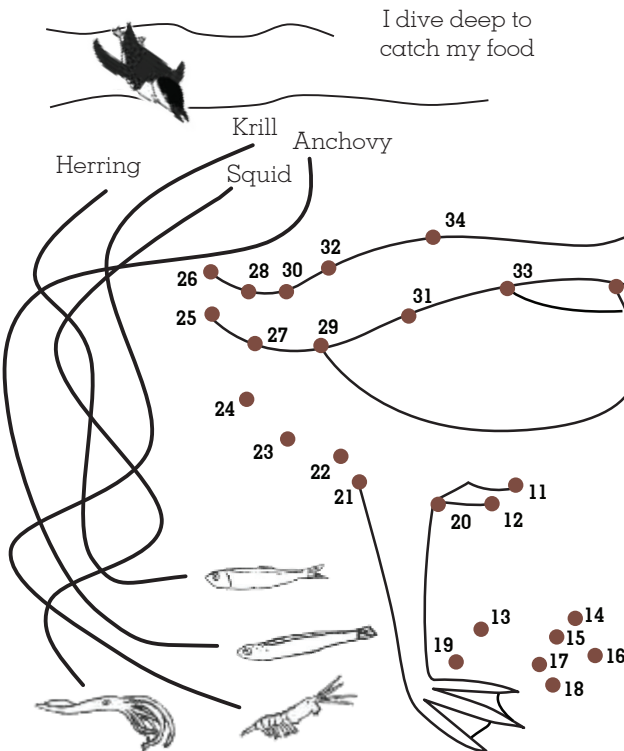




My chick must travel many miles from our tree and make it all the way to the ocean on its first flight

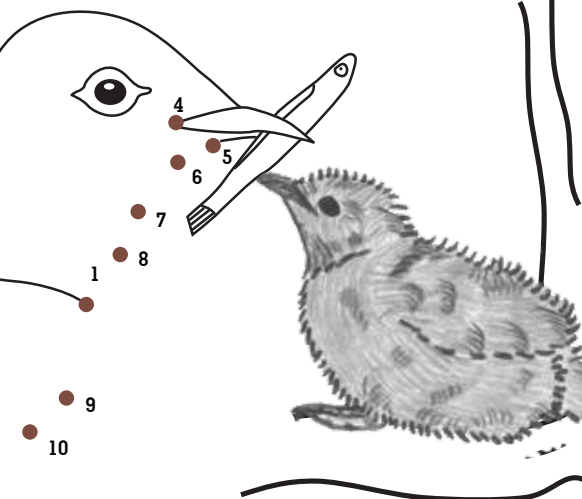


I dive deep to catch my food



## I am a MARBLED MURRELET:

A small threatened sea bird that nests in old growth conifers, like the ancient redwoods



### Threatened and Endangered Species: Marbled Murrelet

Headwaters Forest was set aside for public land and to provide habitat for threatened and endangered species such as the marbled murrelet.

### What is a threatened and endangered species?

A threatened or endangered species is a species that is in danger of becoming extinct. Approximately **25%** of the marbled murrelets nesting activity in the southern Humboldt region may occur in Headwaters.

Artwork and activity by Sabra E. Morin as her Girl Scout Gold Award Project, March 2013

Too many corvids mean my eggs and chicks are less likely to survive



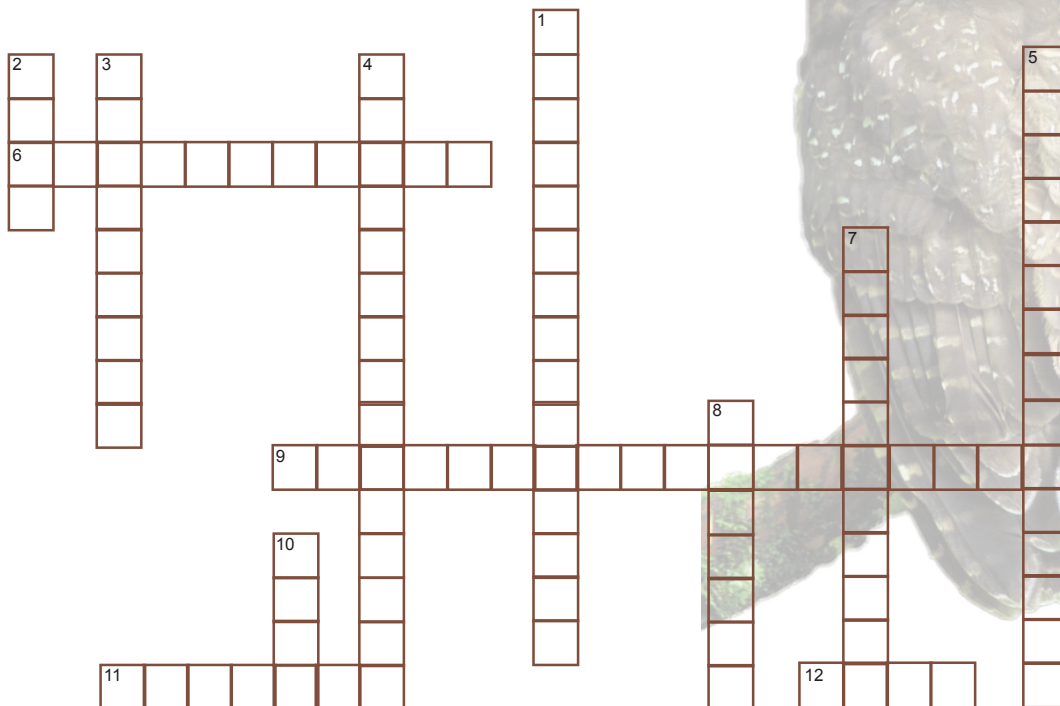
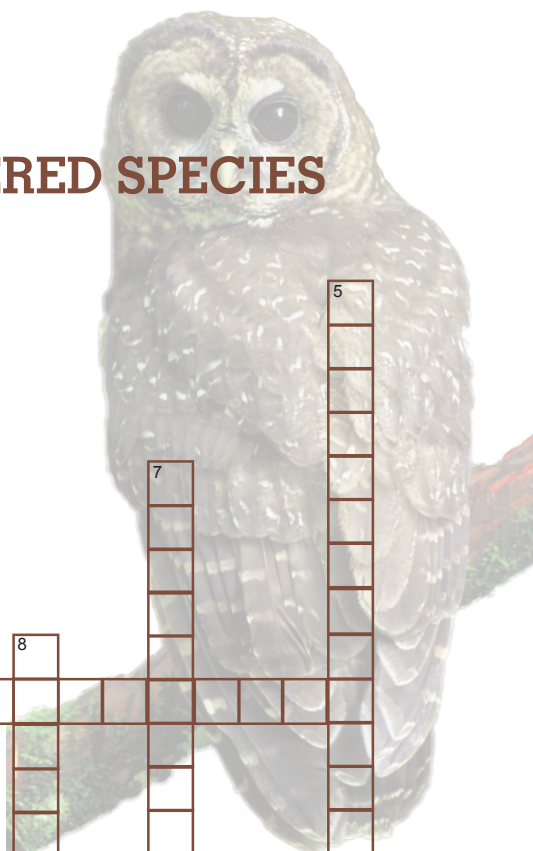
### HOW CAN YOU HELP?

Don't leave food scraps such as apple cores behind. These attract ravens, crows and jays (corvids) who are predators on chicks and eggs.



# Headwaters Forest Reserve

## THREATENED AND ENDANGERED SPECIES



### WORDS

Northern Spotted Owl

Huckleberry

Woodrat

Redd

Caddis Fly Larvae

Corvids

Flying Squirrels

Coho

Anchovies

Marbled Murrelet

Parr

Red Tree Vole

### DOWN

1. They actually don't fly, they glide.
2. This fish goes out to sea after living in Elk River for a couple of years.
3. Favorite food of the marbled murrelet.
4. Sea bird that nests in old-growth trees.

5. Salmon eat these creatures, usually found under rocks.
7. These rodents eat Douglas-fir needles and are food for the spotted owl.
8. These birds can be predators for marbled murrelet chicks and eggs.
10. Stages of salmon life between six months to three years in their native river before becoming smolts.

### ACROSS

6. Flying squirrels eat these berries.
9. This bird primarily eats rodents.
11. These creatures build nests made out of sticks, on the ground, or in the trees.
12. May contain 5,000 eggs covering 30 square feet.





# Headwaters Headlines

Established March 1, 1999



Headwaters newspaper article



Headwaters Rally, Nicholas Wilson



Recontoured hillside post-restoration



Pro-logging demonstration, Brandt Easter



Headwaters protesters



Headwaters Rally, Eric Stomanson



**My Words:**

**Cecilia Lanman**  
**Why did you decide to stand up for trees in Headwaters?**

When we realized that the ancient redwoods were being cut down three times faster than they were before, we knew we had to take action to stop the destructive logging. I began working on saving Headwaters in 1986 and continued through 1999 when the State of California passed a law that permanently protected Headwaters forest and placed it in BLM's care.

# What Would You Stand Up For?

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make a

# WATERSHED

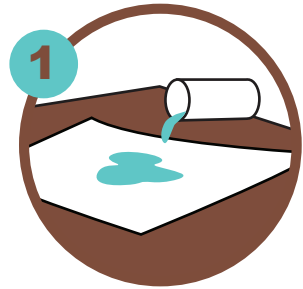
in your home

**1** Water falls as rain or snow. Place a drop of water on a flat sheet of wax paper. Does it run off the paper? If water falls on the flat surface, it may not run off or drain.

**2** In what direction does water flow? Raise one end of your sheet of wax paper and drip water from a cup onto the paper. It should flow downhill. Did it flow downhill?

**3** How are watersheds divided? Fold your wax paper in the center into a tent. Drip water from a cup onto the peak. Down which side does the water drain, left or right, or both? The peak represents the boundary between two watersheds, and the water flows down whichever side it falls on. Watersheds are divided at their highest points.

**4** Are large watersheds made up of smaller watersheds? Loosely crumple your wax paper. Drip water onto the peak again. Does the water follow a crease or line as it flows? Does it pool into spots? What watershed features could these represent? Large watersheds may contain many smaller watersheds, each with several streams and lakes.





# LEARNING FROM NATURE

Describe your forest adventure using words, phrases, pictures, photographs, or anything else that will help you remember your visit.

Listen to the sounds that nature makes. The world is not only a visual one, it supplies us with a wealth of sounds, smells and physical sensations as well.

Here are some things to look out for on your walk:

- Squirrels and woodrats
- Insects and banana slugs
- Salmon spawning
- Rabbits
- Unusual stones or rocks
- Leaves that are brightly-colored or funny shaped
- Trees that are different, including bark, trunks, shape, etc.



Write down your observations here

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## TRY THIS!

Write a 5-7-5 Poem. A 5-7-5 follows the structure of a Haiku. It has three lines. The first line has 5 syllables. The second line has 7 syllables. The third line has 5 syllables again. Try to create your own nature haiku.

### Nature Haiku Poem

(Example)

The bees are buzzing.  
Beautiful flowers are here.  
The flowers smell good.

## OR TRY THIS!

- 1 List one noun (thing) that has to do with the forest (i.e. trees, air, deer, soil).
- 2 List two adjectives (words that describe things) that have to do with the forest (i.e. green, tall, cool).
- 3 List two verbs (action words) that have to do with the forest (i.e. grow, live, whisper).
- 4 List two adverbs (words that describe verbs, other adverbs, or adjectives) that have to do with the forest (i.e. slowly, quietly, majestically).
- 5 Now select and arrange nouns, adjectives, verbs and adverbs to make your poem.

### Forest Poem

(Example)

Trees  
Green and Tall  
Grow and Whisper  
Quietly and Majestically

# BE A POET

“Poetry is what gets lost  
in translation.”

—Ralph Waldo Emerson

Write down your poem here



# Name that Tree!



Draw a line from the description to the picture it describes.

**1** I am the tallest tree in the world, growing up to 350 feet. I have been on the earth for 60 million years. That means dinosaurs also saw them!

**2** They call me a pioneer species that fixes nitrogen; taking nutrients out of the air and putting them back in the soil. Native Americans use my bark for dying nets and basket reeds. I grow quick, but don't live long (80 years).

**3** When a forest has been cut, I grow in large numbers because I love the sun. My latin name has the word "false" in it. Red tree voles like to nest in my tree and eat the needles.

**4** I have the largest leaf in Headwaters and you can make syrup out of my sap. I like to grow along rivers and creeks, shading the water, making it cool for the salmon.

**5** I grow from Kodiak, Alaska to Fort Bragg, California. Salt spray doesn't bother me and I can live close to the beach. When my needles drop, the soil becomes acidic making it hard for other plants to grow underneath me.

**6** I bloom between April and May and my flower is long and is called a "catkin". My seeds blow in the wind resembling white fur during the months of April and May.



**Sitka willow**  
*Salix sitchensis*



**Douglas-fir**  
*Pseudotsuga menziesii*



**Red alder**  
*Alnus rubra*



**Coastal redwood**  
*Sequoia sempervirens*



**Sitka spruce**  
*Picea sitchensis*



**Bigleaf maple**  
*Acer macrophyllum*





# WORD SEARCH

**DIRECTIONS:**

- 1 Search the puzzle for the words on the list.
- 2 Cross out each word as you find it. There are no diagonal words.
- 3 After finding all of the words, start at the top left corner and go through the puzzle, circling each letter you **did not** cross out in the order that you find them (as you would read a book). Write the letters in the space below.

R	E	D	N	A	M	A	L	A	S
E	W	A	T	E	R	S	H	E	D
D	S	I	M	S	G	G	E	B	S
W	A	<del>F</del>	<del>A</del>	<del>L</del>	<del>K</del>	A	L	I	R
O	L	U	G	I	P	E	K	K	E
O	M	N	G	L	L	L	R	E	T
D	O	A	I	Y	S	T	I	C	A
E	N	K	E	Y	P	T	V	T	W
S	K	C	O	R	O	E	E	W	D
T	O	B	E	A	T	N	R	E	A
J	E	E	R	T	T	S	E	N	E
T	R	U	C	N	E	I	O	R	H
R	E	W	O	O	D	R	A	T	F
A	D	I	H	E	O	X	L	A	U
I	D	L	O	P	W	L	I	T	N
N	O	D	R	B	L	M	A	I	G
B	A	T	E	M	O	H	R	B	U
A	N	I	M	A	L	S	T	A	S
R	E	R	O	L	P	X	E	H	E
N	R	R	E	D	A	L	D	E	R

## Animals

Nest

Bat

# Nettle

Bike

Newt

BLM

## Red Alder

Coho

Redd

Egg

Redwood

Elk River

## Rocks

## Explorer

## Spotted Owl

~~Falk~~

Trail

Fun

## Train Barn

Fungus

Tree

## Habitat

# Salamander

## Headwaters

## Salmon

Home

Watershed

### Key

Wild

Lily

## Wood Rat

Maggie

## Headwaters Forest Reserve







# CAREER PROFILE

Julie Clark  
**Park Ranger**  
Headwaters Forest  
Reserve



Julie at the BLM office in  
Arcata, California

## WHAT SHE DOES

Julie spends most of her time patrolling the 5 miles of Elk River trail. She talks with visitors and answers questions about the natural environment, length of the trail, rules and regulations. She also does minor trail work, clearing vegetation from the trail, and trimming back red alders and berry bushes in the summertime. Local schools go on field trips where Julie leads as many as 90 school children through the forest teaching them about Headwaters and local history. Sometimes she plays the camp cook (pictured below) from the long gone town of Falk. She is also trained in first aid and is prepared to help hikers in need.

## EDUCATION

Julie has a bachelors of arts degree with a minor in history, a teaching credential in art and a masters degree in social science. Her art degree and teaching credential help her teach local history (the town of Falk) and nature journaling at the Headwaters Education Center. She has worked in the natural resources field for over 20 years, in such jobs as a wilderness ranger in the Sierra Nevada Mountains, a park aide at Hearst Castle, and a trail worker in Mammoth. When she was younger, she wanted to be a horse jockey and actress.



Julie offering a banana slug for  
someone brave to kiss it.



Julie playing Maggie the  
camp cook from Falk.

## SOMETHING TO THINK ABOUT

Julie enjoys teaching students about the environment. She believes that young people should know about their public land and what it is to be great stewards. She also loves teaching about the local history because it connects individuals to their past and creates more of an understanding about their local community.



Bureau of Land Management

# JUNIOR RANGER

Place for Official Stamp

As a Bureau of Land Management Junior Ranger, I promise to:

- do all I can to help preserve and protect the natural and cultural resources on our public lands,
- be aware of how my actions can affect other living things and the evidence of our past,
- keep learning about the importance of our heritage, and
- share what I have learned with others.

\_\_\_\_\_

Date

\_\_\_\_\_

Staff Signature

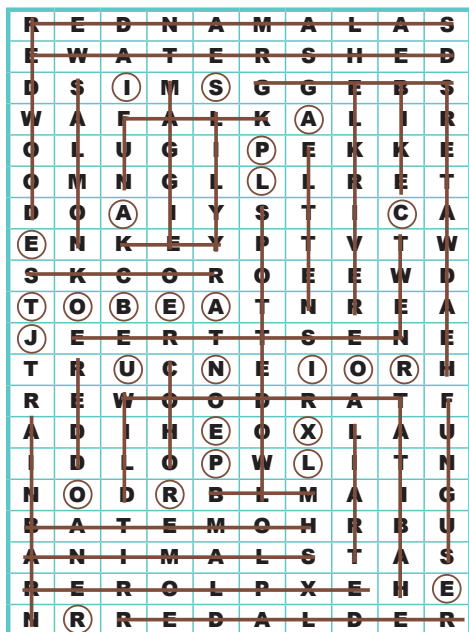
\_\_\_\_\_

Ranger Signature





## Word Search Answer Key



Animals  
 Redd  
 Elk River  
 Egg  
 Wood Rat  
 Fungus  
 Falk  
 Nest  
 Coho  
 Newt  
 Spotted Owl  
 Trail  
 Maggie  
 Explorer  
 Red Alder  
 Home  
 Redwood  
 Lily  
 Bat  
 Wild  
 Headwaters  
 Tree  
 BLM  
 Rocks  
 Train Barn  
 Bike  
 Habitat  
 Fun  
 Salamander  
 Salmon  
 Key  
 Nettle  
 Watershed

Headwaters Forest Reserve I S A

P L A C E T O B E A J U N I O R  
 E X P L O R E R

## Crossword Answer Key

C O N H U C K L E B E R R Y  
 O H O V I E S  
 M A B L G S D M U  
 F L Y I N G S Q U I  
 N O R T H E R N S P O T T E D O W L  
 R R E V V R A  
 P E A L L I O V  
 R E S D L A  
 W O O D R A T S R E D D E

## Quest Answers

1. Douglas fir
2. Shelter
3. Humboldt Bay
4. Three
5. Coho salmon
6. Clean watershed is healthy for fish and clean water for people.
7. A storm or a fire.
8. Too many trails to the river cause erosion and too much dirt in the river, harming fish habitat.
9. Falk Mill

## Name that Tree! Answers

1. (Coastal redwood- Sequoia sempervirens)
2. (Red alder- Alnus rubra)
3. (Douglas-fir- Psuedotsuga-menziessii)
4. (Bigleaf maple – Acer macrophyllum)
5. (Sitka spruce-Picea sitchensis)
6. (Sitka willow – Salix sitchensis)



# READY MORE?

## COLLECT ALL 3!

- 1 Pick up the King Range National Conservation Area and California Coastal National Monument Junior Ranger activity books at the BLM Arcata Field Office or the King Range Project Office. Once you complete all three books, bring them back to one of the offices and receive some new exploration tools!

<http://blm.gov/t9kd>

<http://blm.gov/v9kd>

- 2 Find other public lands to explore in Humboldt County by visiting: [www.outdoorscool.com](http://www.outdoorscool.com)



**Extra Assignment:** Watch the Headwaters Outdoors Cool video and answer this question:

What activity is the boy doing in the video?

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Use your smart phone to scan the QR code and find out more about outdoors cool!





# NOTES



# DRAWINGS







## For Further Information

Bureau of Land Management  
Arcata Field Office  
1695 Heindon Road  
Arcata, CA 95521  
707-825-2300  
[www.blm.gov/headwaters-forest](http://www.blm.gov/headwaters-forest)

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