

# Bandelier National Monument



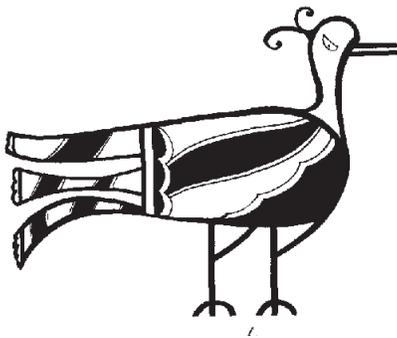
## Junior Ranger Challenge Booklet



**2nd and 3rd Grade**

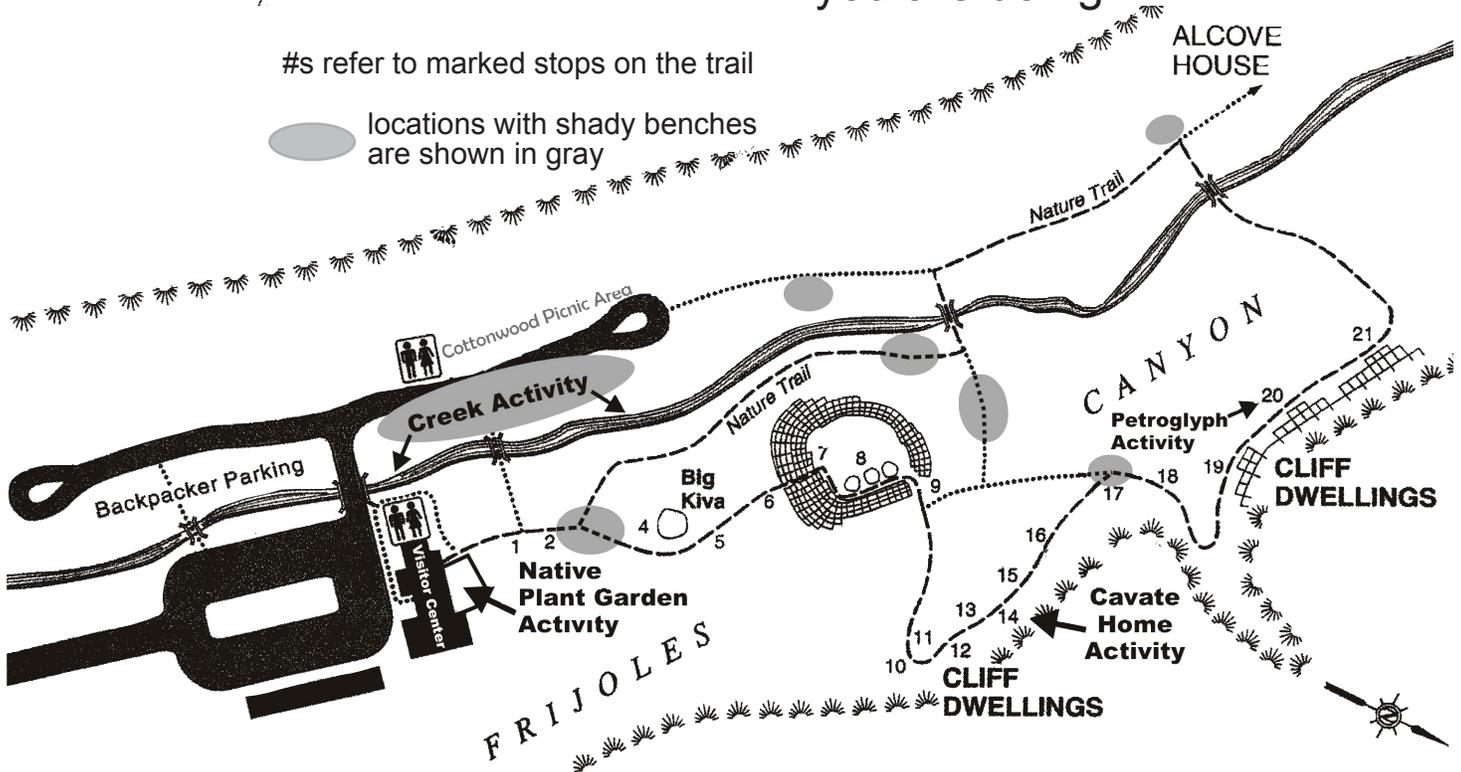
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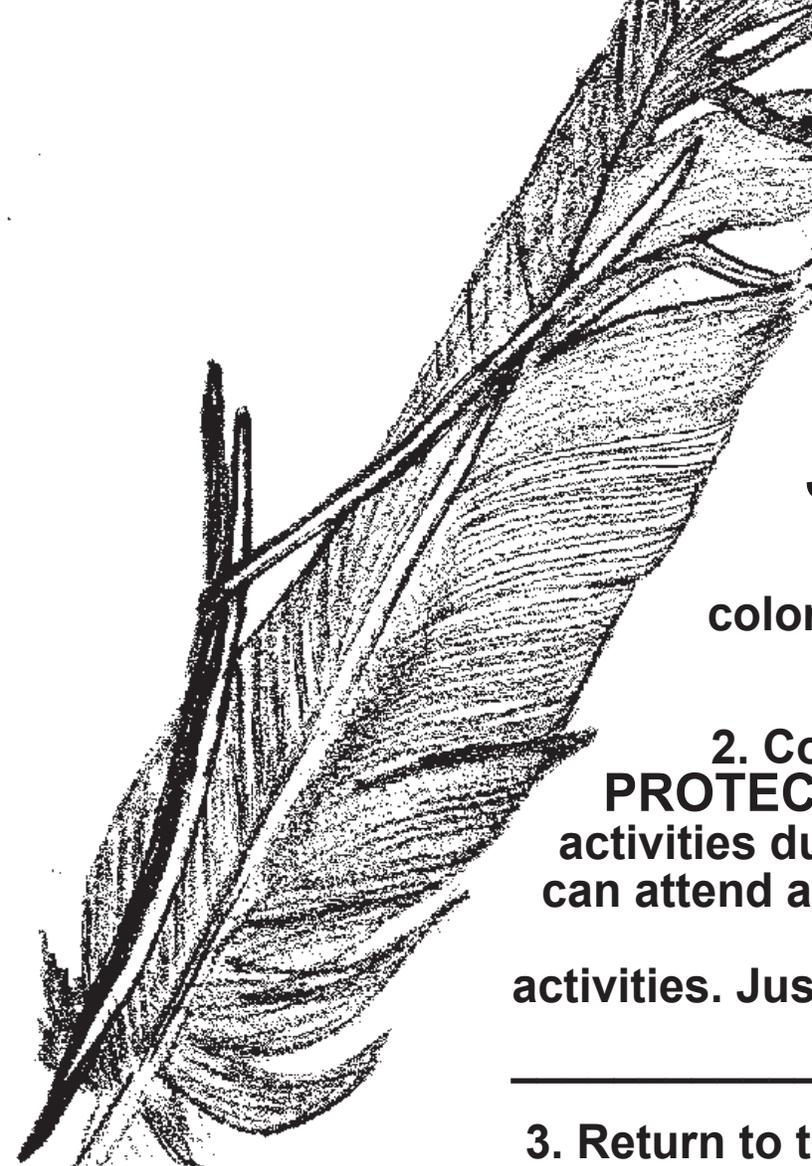
# Map & Directions

Some of the activities in this booklet have to be done in particular places. Look on the map for the location of the next activity you are doing.



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## HOW TO BECOME A Bandelier Junior Ranger:

1. Pick up a pencil, colored pencils, and a clipboard in the visitor center.

2. Complete the RESPECT AND PROTECT activity, plus 3 more of these activities during your visit to Bandelier. You can attend a Ranger-led program to replace one of your activities. Just have the Ranger sign here:

\_\_\_\_\_

3. Return to the visitor center and give this booklet to a Ranger to complete your challenge.

Make sure to bring the following items on your exploration:

**water, snacks, sunscreen, weather appropriate clothing, and shoes you can wear in the water**

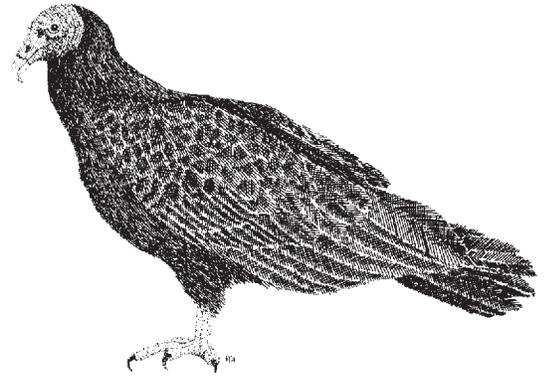
(if you are going to do the creek activity, we suggest saving it for

last). **Please refer to the map and find the shady places on the trail to complete your activities.**

# PROTECT and RESPECT

## Fill in the Blanks!

This activity is very important. You must complete it before starting on your challenge in the rest of the park. We suggest that you go to the back porch to do this activity.



1. Stay on the \_\_\_\_\_.

2. Climb only on the \_\_\_\_\_.

3. Look for \_\_\_\_\_ to pick up.

4. Do not \_\_\_\_\_ or \_\_\_\_\_ the animals.

5. Leave rocks, pine cones, lizards and anything else that \_\_\_\_\_ here, in its \_\_\_\_\_.

6. Respect the other visitors by speaking in a \_\_\_\_\_ voice.



# Investigating Plant Uses

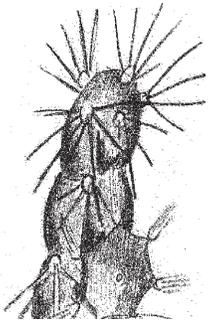
For this activity, you are going to find plants and record how they were used by the Ancestral Pueblo people.

## DIRECTIONS:

Step 1: Go to the native plant garden outside the visitor center.

Step 2: Find the plants on this page, and write or draw some of their uses (printed on the plant sign next to its picture).

**Safety first: stay on the grass, and do not touch or eat the plants!**



Cholla

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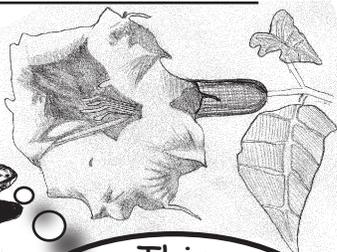
Four-winged Saltbush




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This plant, Datura, is toxic. DO NOT TOUCH IT!

### Plant Use Key:



Eat



Drink



Soap



Weapon Making



Paint



External Medicine



Internal Medicine

Sewing



Weaving

Yucca




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Three-leaf Sumac

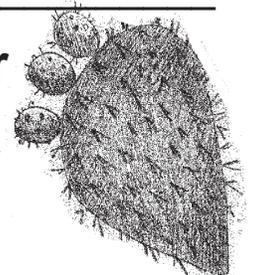



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Prickly Pear




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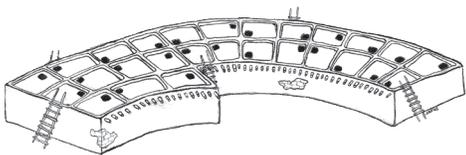
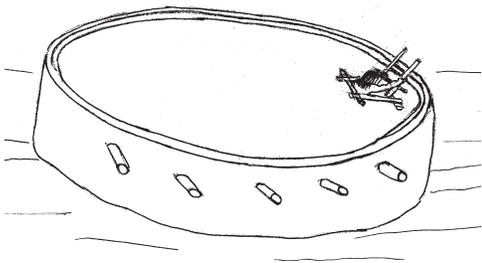


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# Before and Now

Draw a line connecting the before picture to the now picture. If your group has a trail guide, read through it to learn more.

## BEFORE



## NOW



Stop #4: This is a **kiva**. It used to have a roof, made of logs covered in mud plaster, with a door in the top. These buildings are still used in present-day Pueblos. Why is it such a special place?

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Stop # 7: This structure is called **Tyuonyi**. It is a circular village with many small rooms, doors in the rooftops and no windows. Some rooms were probably used for storing food. What foods could the Ancestral Pueblo people have stored here 600 years ago?

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Stop #11: These are **cavates**. Cavates were the back rooms of homes, but today the rest of the house has eroded away. The homes built in front of cavates were multi-storied. Look out the door at Tyuonyi. Would you rather live in the cavate or the big village? Why?

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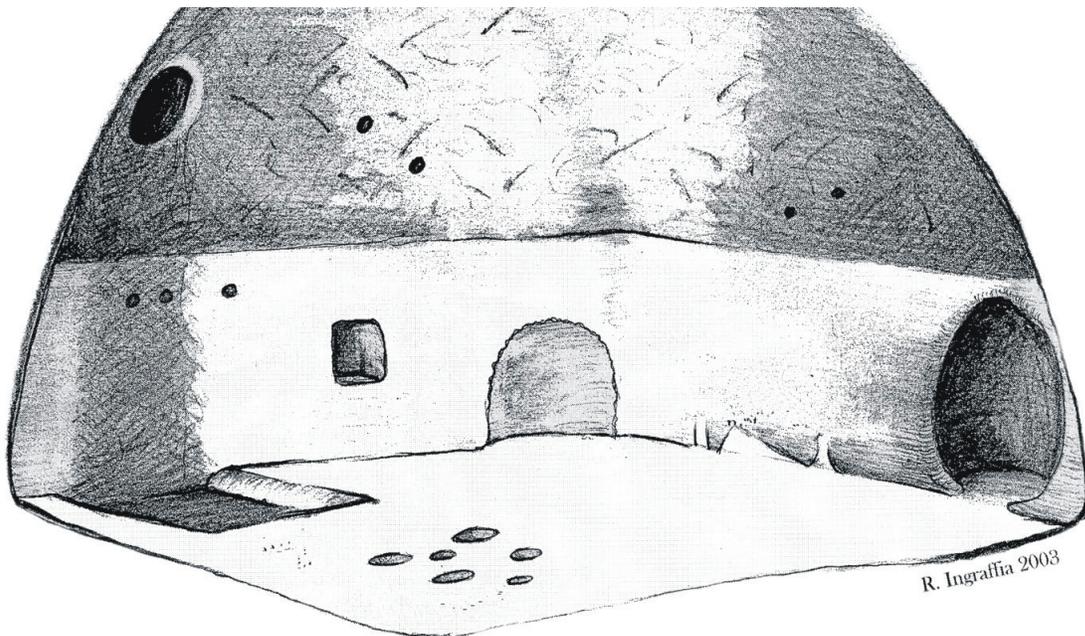


# Inside a Cavate Home

At stop #14, climb the ladder into the cavate. Once inside, sit to the side and notice everything around you. Where would you do the following activities if this were your home 600 years ago?

**BUILD a fire, STORE food in pots, SLEEP**

Draw or write your answers onto the image here:



Would you like to live in this cavate? Why or why not?

Please stay on the trail. I may be waiting if you don't.

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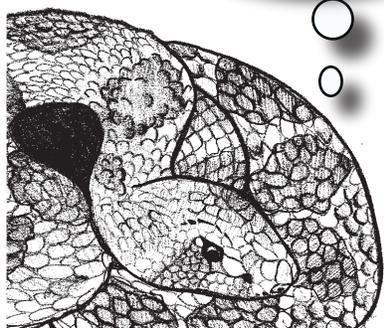
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What would you miss from your life today?

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# Petroglyphs

When you get to the Long House (trail guide stop #20) look up along the cliff walls and you will see pictures carved into the stones. These were created more than 500 years ago by the Ancestral Pueblo people. No one is sure exactly what they mean or why they were created. They do show us some of the things that the Ancestral Pueblo people saw or thought about.

In the box below, draw 3 petroglyphs.

Should people now draw over the old petroglyphs? No, that would be rude.

# Wildlife Signs

Be sure to look for wildlife, or signs of their presence, along the trail. Draw a line between the animal and its sign. Then, fill in the blanks.

raven



Abert's squirrel



nuthatch



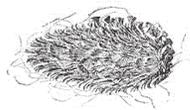
black bear



mule deer



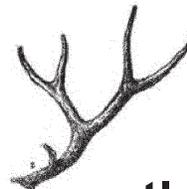
tracks



chewed cones



feather



antler



nest

I am a small mammal that lives in the ponderosa pine trees. I eat branches and seeds. People sometimes think I look like a rabbit because of my hairy ears.

Who am I? \_\_\_\_\_

I am a large furry black mammal that can climb trees. I eat berries, bugs and roots. I come to Frijoles Canyon to drink water from the creek.

Who am I? \_\_\_\_\_

I am a noisy black bird that says, "CAW! CAW!" See me in the sky or look for my black feathers on the ground.

Who am I? \_\_\_\_\_

I am a medium-sized mammal with hooves. If I am a buck, I regrow antlers every year. Look for me and my tracks at Bandelier.

Who am I? \_\_\_\_\_

I am a small bird. I eat seeds and fruit. Look for me walking up and down the trunks of trees.

Who am I? \_\_\_\_\_

This activity is not recommended in cold or stormy weather.

# Creek Biologist: Is this creek healthy?

In this activity, you are going to observe the bugs in the creek and let them tell you if the creek is healthy.

## DIRECTIONS:

STEP 1: Get an adult's permission and supervision for this activity. You are going to be getting your hands and feet in the creek.

STEP 2: Gather your supplies: a water microscope from the visitor center and shoes to protect your feet in the water.

STEP 3: Take your supplies, this booklet, an adult and yourself down to the creek.

STEP 4: Look around the creek and in it. Can you see any bugs on the surface of the water or in the water already? If so, try to identify them.

STEP 5: Very carefully, pick up rocks in the creek and turn them over to look for bugs under them. If you see caddis fly larvae, do not remove them from the rock.

STEP 6: Observe your bugs!!! Use your eyes and the microscope if you need it.

## HOW TO USE THE WATER MICROSCOPE:

- 1: Unscrew the cap.
- 2: Scoop the bugs into the cap.
- 3: Put the cap back on.
- 4: Turn the whole thing over and set it on a flat surface to keep it steady.
- 5: Look through the lens in the top to observe your bug up close.

## SAFETY TIPS:

- 1) Do not drink the water.
- 2) Wash your hands after playing in the creek.
- 3) Watch out for poison ivy and nettles.
- 4) Look out for branches overhead.
- 5) Have fun!!!

Please remember where you found your bugs so that you can release them to their homes. Be gentle as you put them back in the water!



# Creek Observations & Conclusion

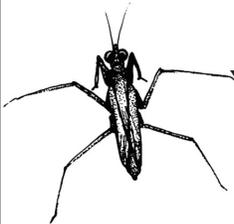
Circle the bugs that you see! Some bugs are very sensitive to pollution and their presence tells us about the health of the creek overall.

## HEALTHY creek signs



### Caddis Fly Larva:

You will find these casings attached to the underside of rocks. Pick the rocks up gently and turn them over to look for these guys. Always put them back kindly too, please.



### Water Strider:

You will find them gliding on top of the water.



### Mayfly Larva:

You will find them underneath rocks too.



### Stonefly Larva:

You will find them underneath rocks too.

## UNHEALTHY creek signs



### Leech:

If you see this guy, do not touch him!



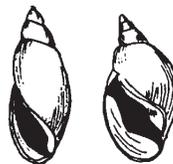
### Mosquito Larva:

They might be swimming around in shallow spots.



### Midge Larva:

You might find them squirming in leaf litter.



### Pouch Snails:

You might find them sticking onto rocks.

Is this creek healthy?

**YES** or **NO**

(Circle your answer)



# Interview with a Ranger



Find a Ranger in the park to interview.  
Ask them the following questions, and  
record your answers here.

**Q**uestion: What is your name? How long have you been a Park Ranger?

**A**nswer: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Q**uestion: Why do you think your job is important? Why do you enjoy it?

**A**nswer: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Q**uestion: \_\_\_\_\_ ?  
(write your own question here)

**A**nswer: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



# Write a Bandelier Haiku

A haiku is a poem that has 5 syllables in the first line, 7 syllables in the second line, and 5 syllables in the third line.

Following this simple format, they are easy to write. Try it out on these lines, and look to the example if you get stuck.

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## EXAMPLE:

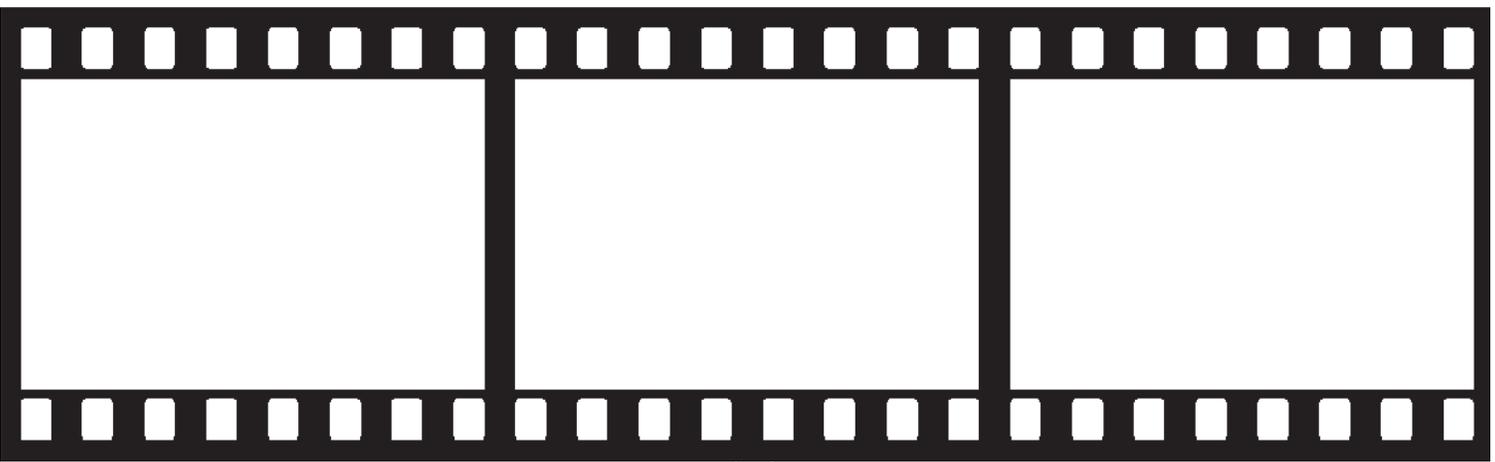
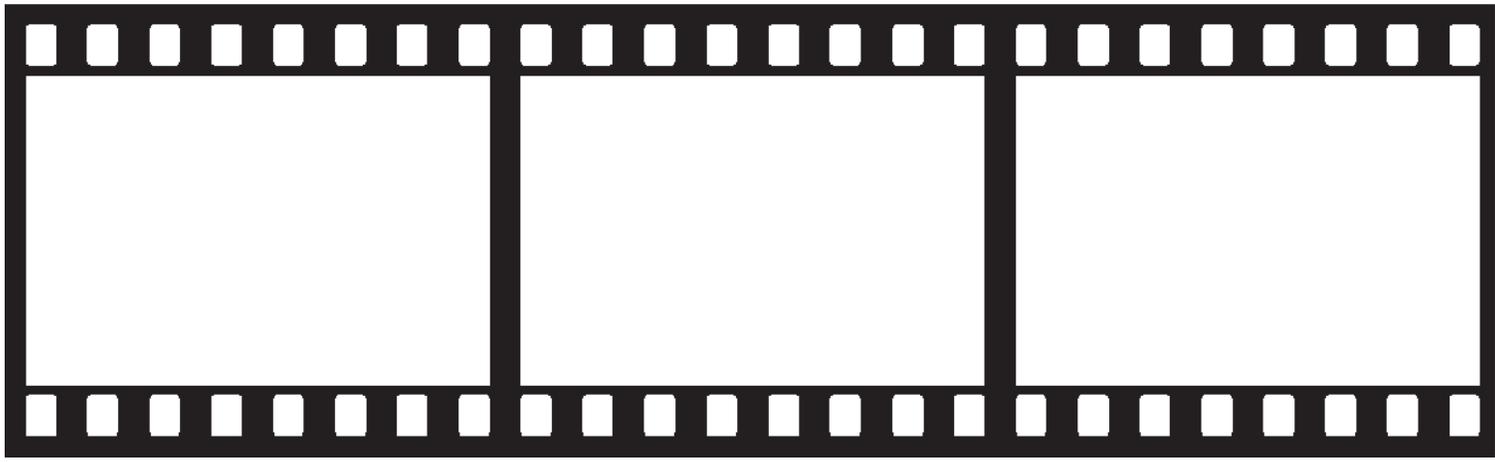
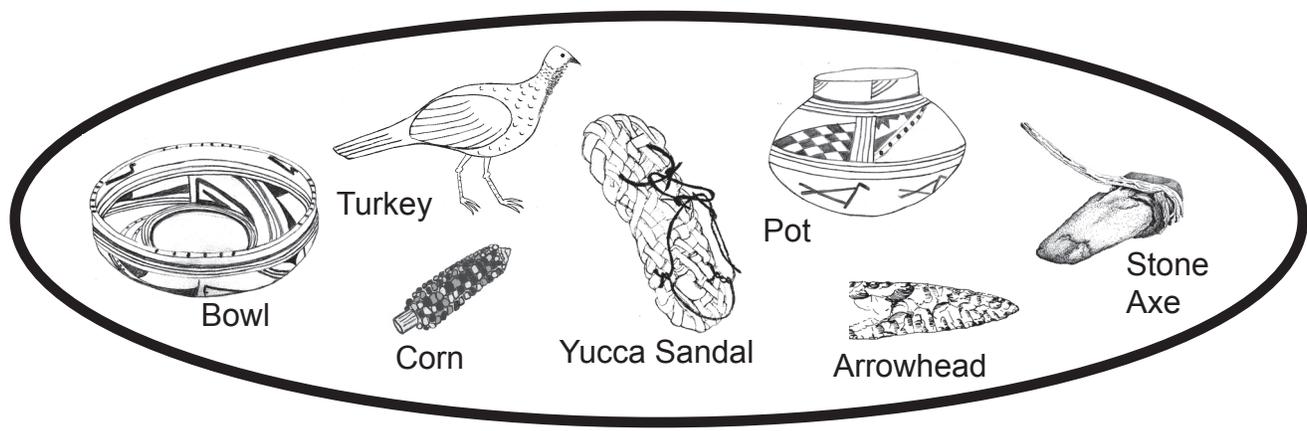
The tree branch bounces!  
Needles fall, wings flap above,  
a raven takes flight.





# Write an Ancestral Pueblo Story

Imagine that you were living here 600 years ago and write or draw a story board of a day in your life. Use these items from the Ancestral Pueblo people to tell your story.





# Nature's Recyclers



This bird is called a **turkey vulture**.

Vultures eat the decaying remains of dead animals. When a large predator, like a coyote or mountain lion, leaves leftovers, vultures fly down and

make them their dinner. Because vultures make sure that nothing goes to waste, they are nature's recyclers !!!

**What things do you recycle at home or school?**

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**How does recycling help the earth?**

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**What are some other simple things you do to help respect and protect the earth?**

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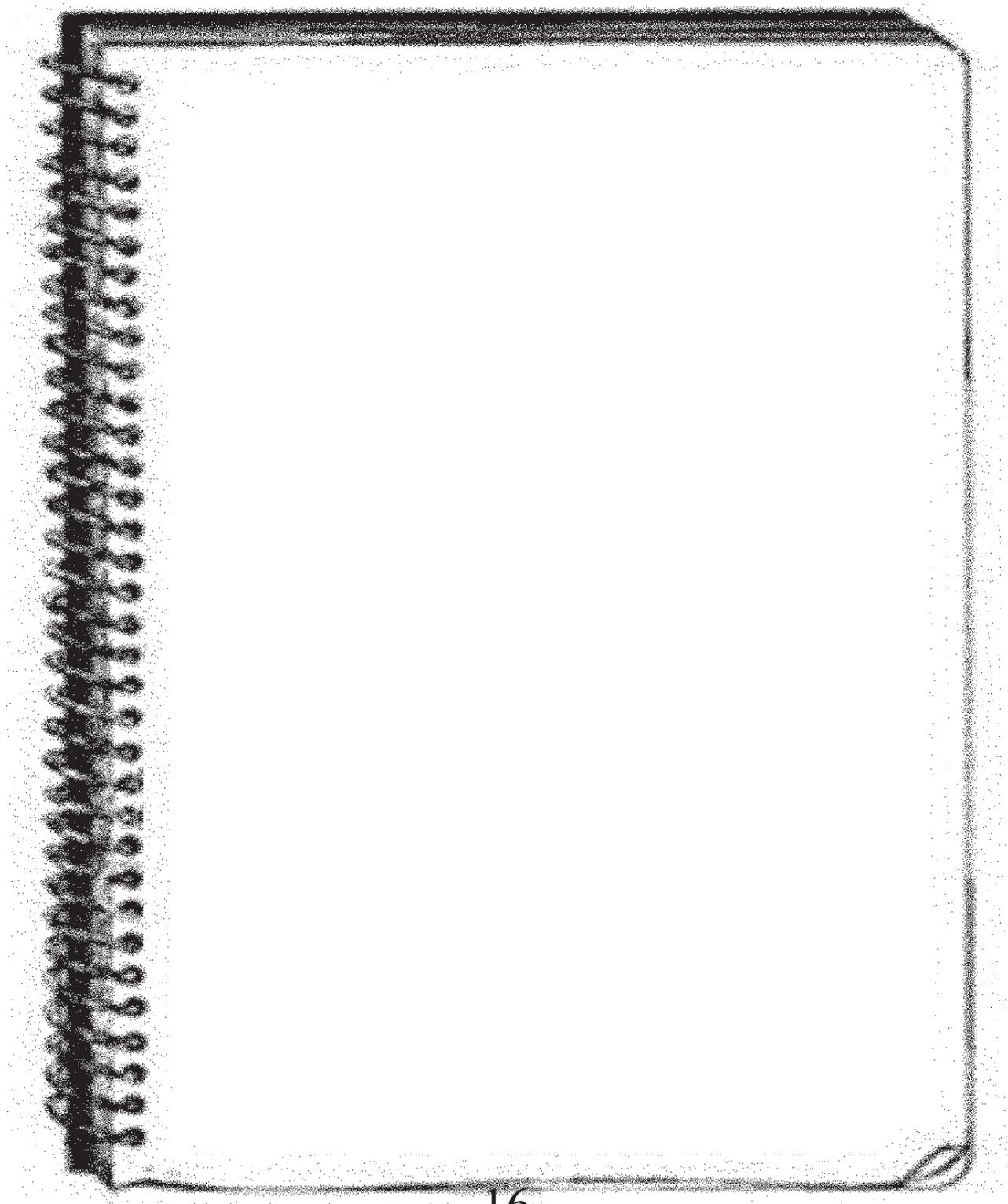
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# Nature Notes

On this page, take some field notes of things that you've seen in the park. Field notes can be drawn or written observations.

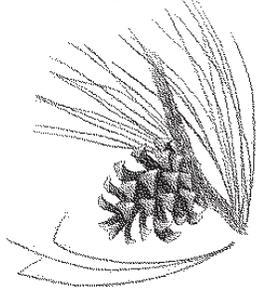


# Find a Ponderosa Pine

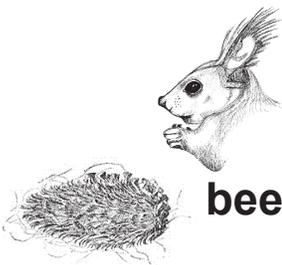
When you are on your way back to the visitor center, stop where you see tall evergreens. Look at the trees.

Check the boxes that apply to your tree. If you check 3 or more, it's a ponderosa!

This tree's bark looks like a jigsaw puzzle, and has shades of color from yellow to dark brown.



This tree has long needles that grow in bunches of three, and big pine cones.



Beneath this tree, I see chewed up pinecones, signs that a squirrel has been enjoying the delicious seeds inside.

This tree is tall and skinny.

**Now stand close to the tree and smell the bark.**

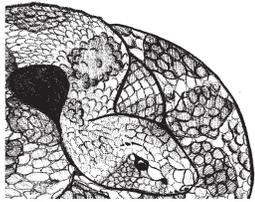
**What does it smell like?**





# I Wish I Were A...

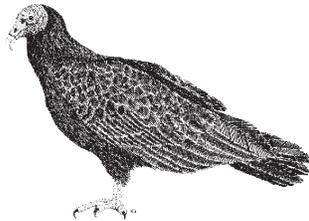
Bandelier is a great place to live if you're an animal. With deep green canyons, flowing creeks, and clear open skies Bandelier is home to many different kinds. If you were an animal living in Bandelier, which of the ones pictured below would you be? Circle it and answer the following questions about its life.



RATTLESNAKE



LIZARD



TURKEY VULTURE



MULE DEER



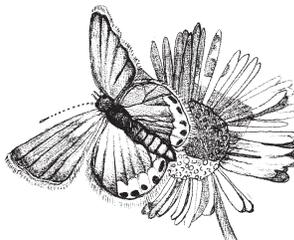
MOUNTAIN LION



RAVEN



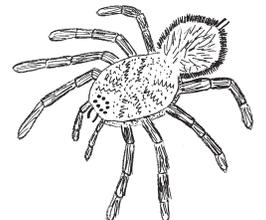
BEAR



BUTTERFLY



ABERT'S SQUIRREL



TARANTULA

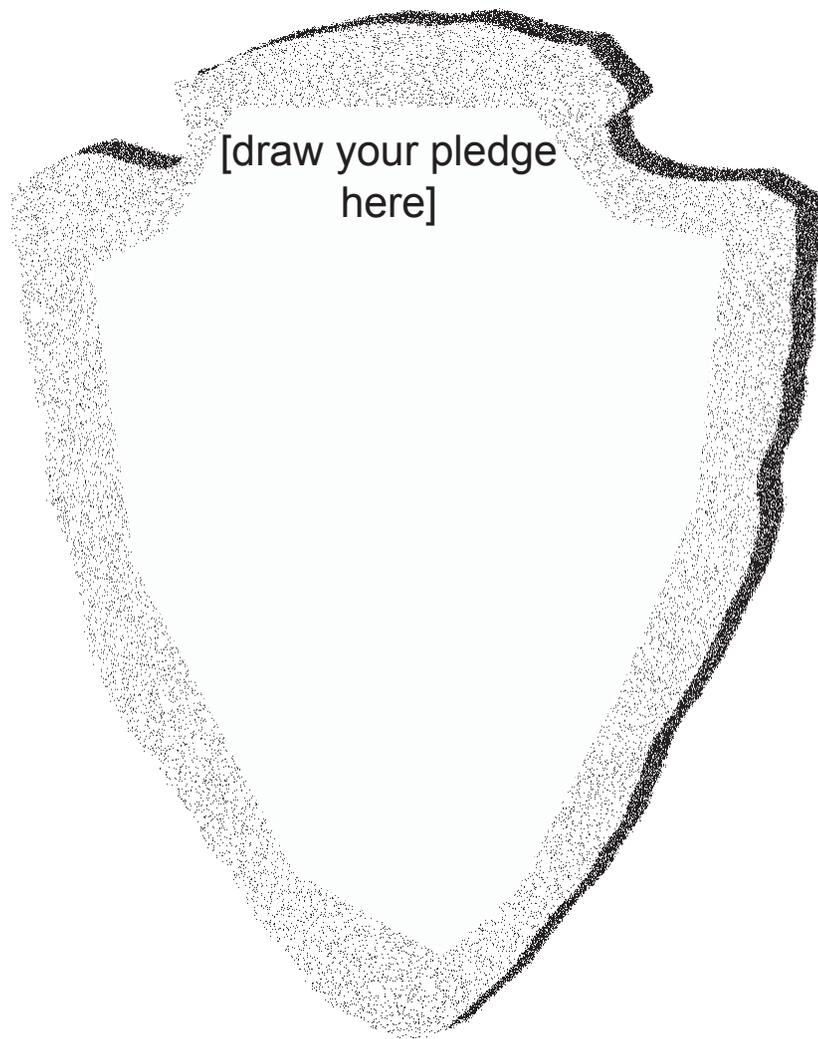
What would be the best thing about being this animal? What would be the worst thing? \_\_\_\_\_

Describe your life as this animal. Include where you live, what you eat, and where you sleep. \_\_\_\_\_

As this animal, how would you spend the winter? \_\_\_\_\_



# Junior Ranger Pledge



**As a Junior Ranger,  
I promise to  
explore the  
wonders of the  
National Parks and  
nature all around  
me; to learn the  
importance of  
every living thing;  
to live every day as  
earth's best friend;  
and to help others  
do the same.**

This Junior Ranger booklet was funded by the National Park Foundation, national charitable partner of America's National Parks with support from the El Pomar Foundation. The National Park Foundation supports the NPS Junior Ranger program as part of their nationwide effort to connect children to America's heritage and ensure the future of our national parks.



**NATIONAL PARK  
FOUNDATION**

**To learn more about the online NPS Junior Ranger program, visit [www.nps.gov/webrangers](http://www.nps.gov/webrangers).**

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