



Junior Ranger



Photo by Eve West



National Park Service photo



National Park Service photo



Photo by Jodi French-Burr

Welcome to the Junior Ranger Program

There are over 400 National Park Service sites across America. Each one tells part of America's story. New River Gorge National River, Gauley River National Recreation Area, and Bluestone National Scenic River are part of this park system.



Junior Rangers care for these special places and help others learn about this rich heritage. As a Junior Ranger you will ...

- **Explore:** Discover fantastic places in parks that make these sites treasures of America.
- **Learn:** Learn about the natural and cultural things that make these parks special places.
- **Protect:** Help protect these parks for the enjoyment of present and future generations.

Here's how you can become a Junior Ranger (earn a badge) at New River Gorge National River:

Everyone: Complete at least four green ribbon activities.



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<input type="checkbox"/> Leave No Trace and You	14	<input type="checkbox"/> Attend a ranger program	22
<input type="checkbox"/> Visit the Visitor Centers	16	<input type="checkbox"/> or watch the park film	
<input type="checkbox"/> Arrowhead Symbol	19	<input type="checkbox"/> Interview a ranger	22

If you are 5 to 9 years old:

Complete at least four red ribbon activities.

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If you are 10 years old or older:

Complete at least four red ribbon and four blue ribbon activities.

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Earn the Junior Ranger Patch:

Complete any two additional activities from any list above.

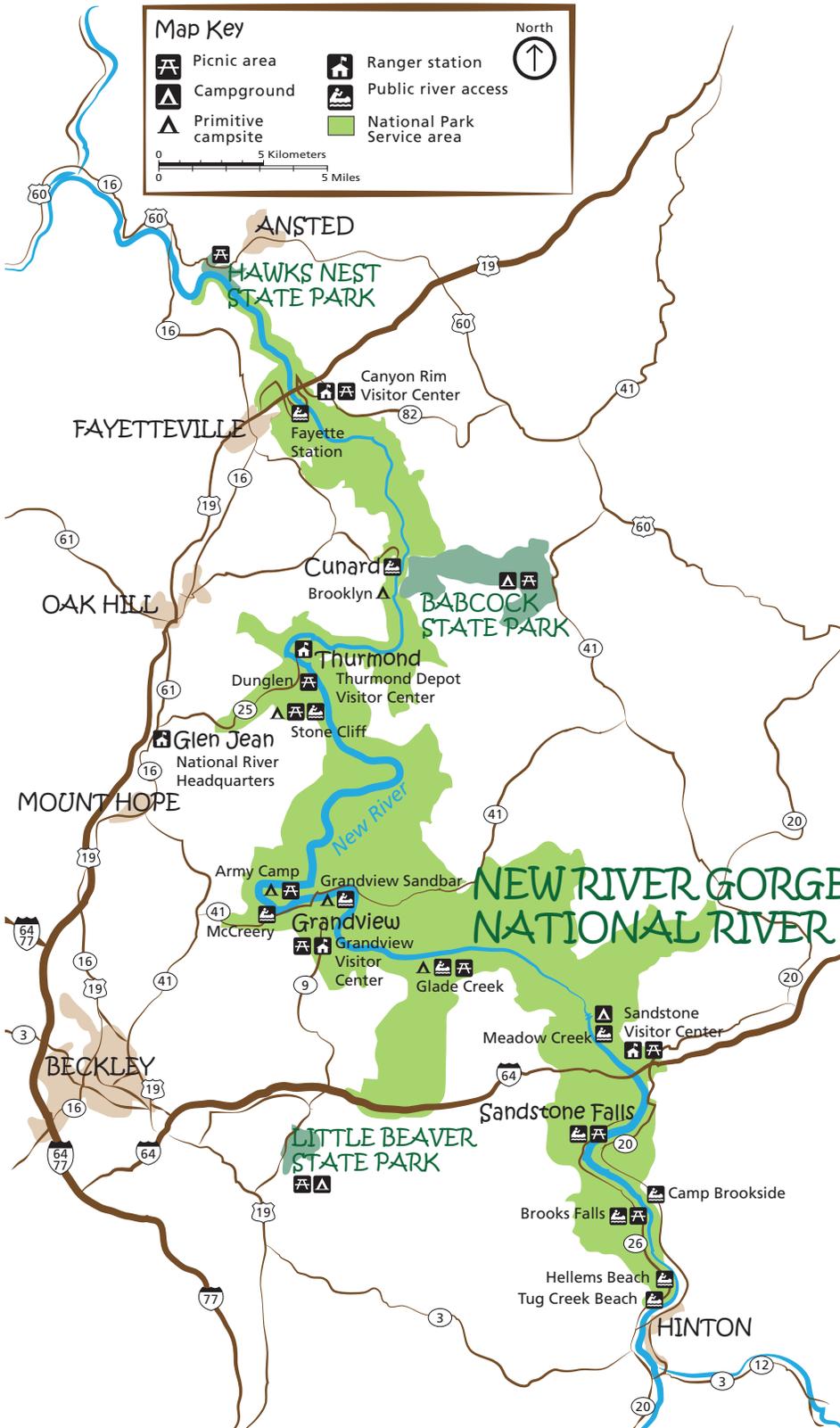
1. _____
2. _____



Fun with Maps



Find your way around the park using a park map. Use the map below to answer these questions about New River Gorge National River.



- _____ Falls is a large waterfall on the New River just south of Sandstone Visitor Center.
- What are the names of two park visitor centers, the ones farthest north and south?

and _____
- The New River flows from the bottom of the map toward the top of the map. What direction does the New River flow?

- Name two places you can have a picnic in the park.

and _____
- Name one place where you can camp in the park.

- Name one place where boaters can access the river.

What's For Lunch



Everyone has things they like to eat. Don't you? Animals have favorite foods, too.

Serve up the best, most nutritious meal for each of the critters below. Find each animal's favorite foods in the food bank, then put that food group number on each animal's plate.

Bear, deer, and owl illustrations © Zachery Zdinak

white-tailed deer



great horned owl



black bear



Food Bank



mice, squirrels, & snakes



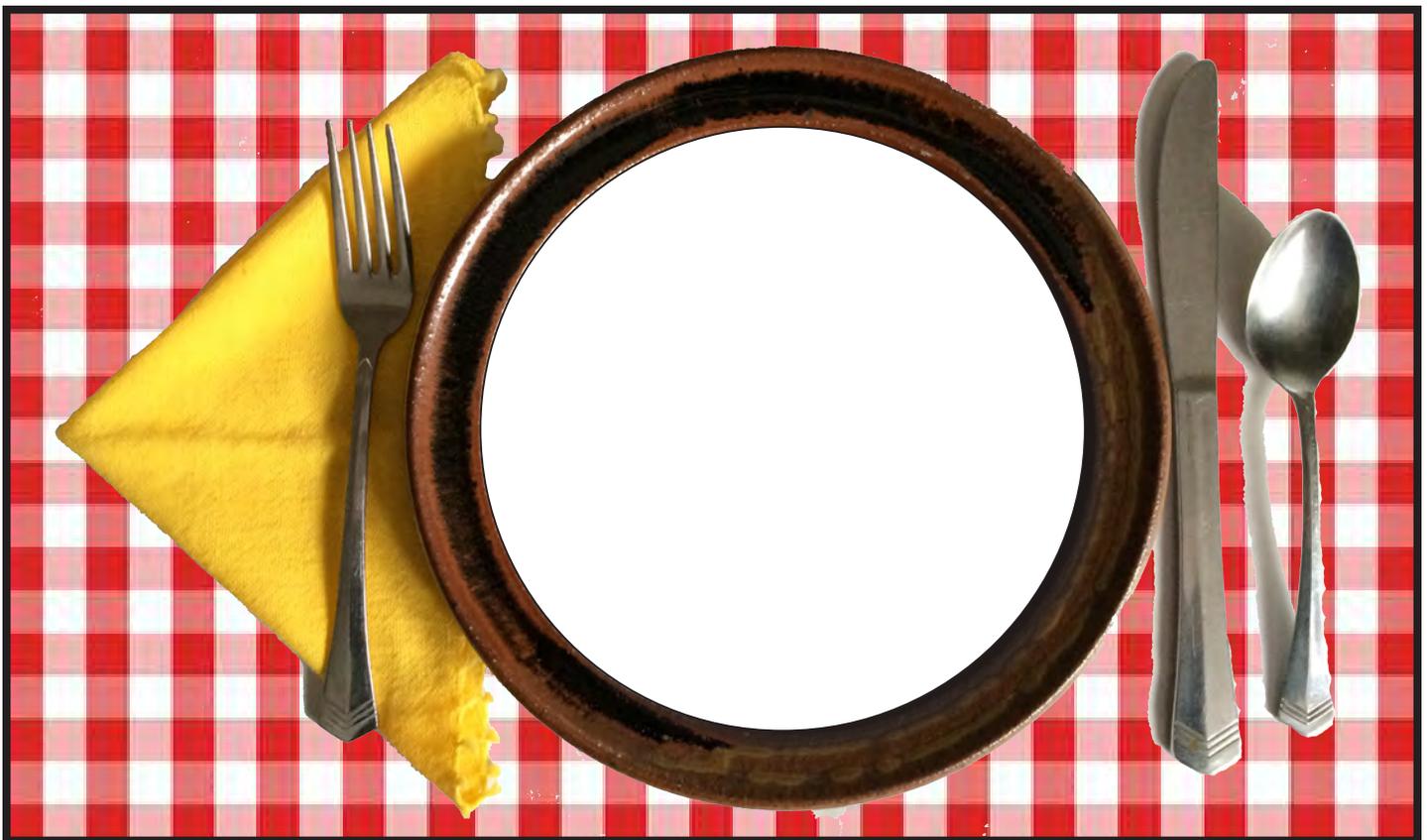
fruit, baby insects, & dead critters



acorns, fruit, & grass

What did you have for lunch?

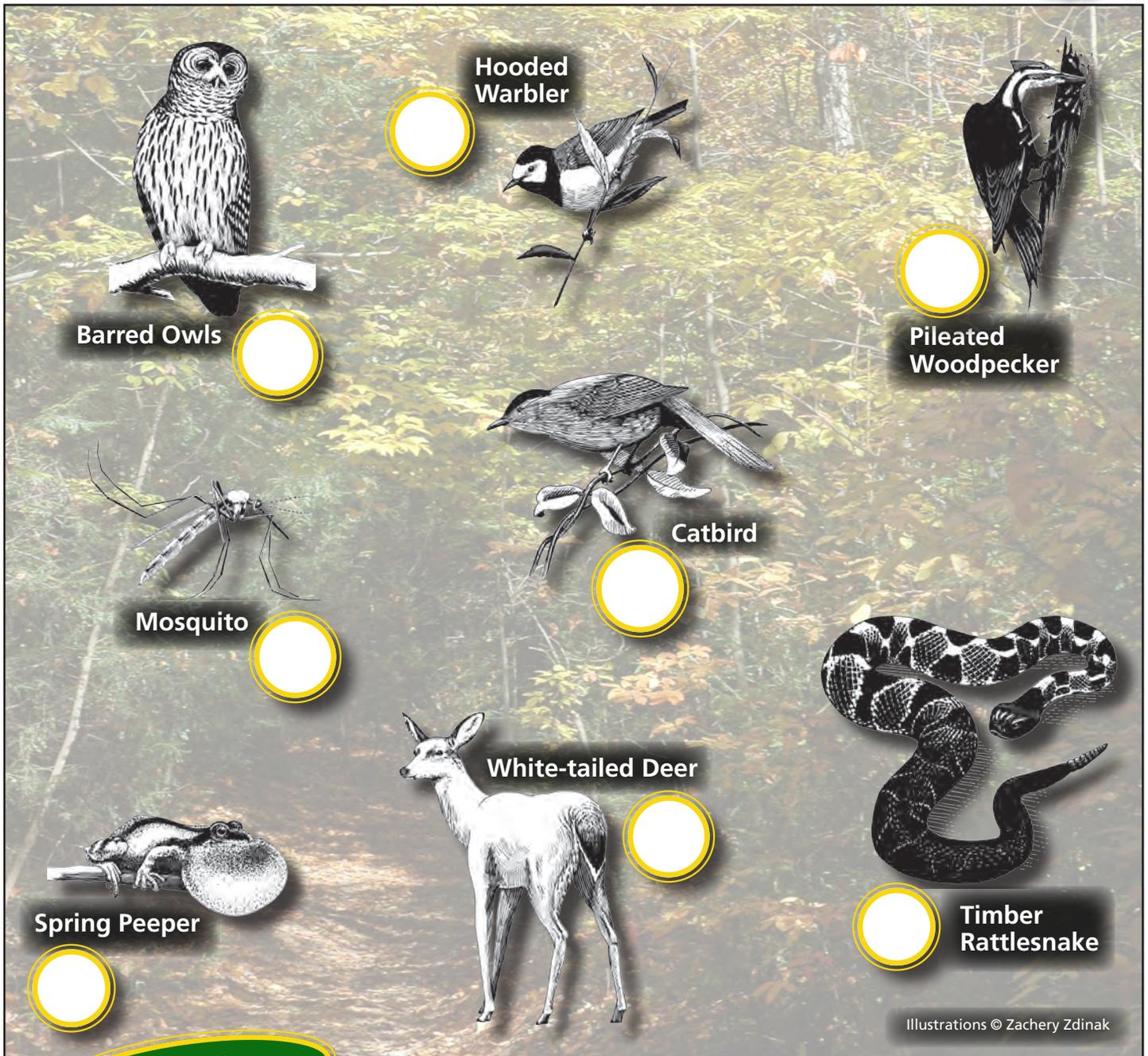
Draw a picture of a food you like to eat on the plate below.



Sounds Like ... a Call in the Wild



Nature is amazing in so many ways, especially the sounds made on this living planet. Look through the **Sound Bites** clues below and match the critter to its sound number.



Illustrations © Zachery Zdinak

Sound Bites

- 1** "Who, who, who cooks for you?"
It sounds like I'm hungry in the night.
- 2** "Meow, meow"
I sound like an animal that lives with people.
- 3** "Bzzzzzzzzzzz"
I'll try to whisper a secret in your ear.
- 4** "Rattle, rattle, rattle"
I'll warn you when you're too close for my comfort.
- 5** "Peep, peep, peep"
I say my name, plus X marks the spot on me.
- 6** "Knock, knock, knock ..."
I work through wood to get my insect food.
- 7** "Huff"
I'll warn my friends with an airy puff when you're near.
- 8** "A hood, a hood, a hood on me"
Do you like my black hat?

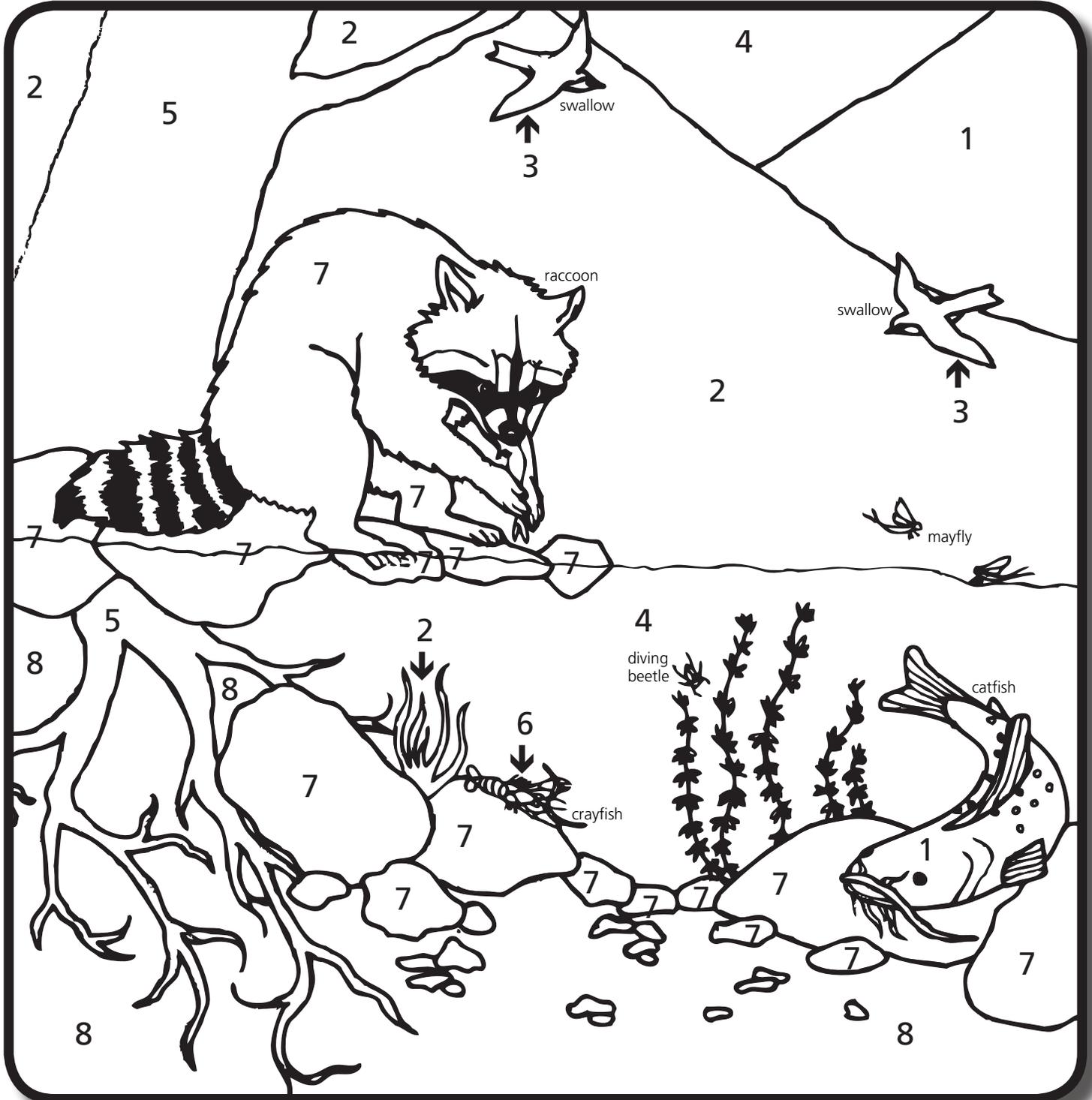
Life Down Under



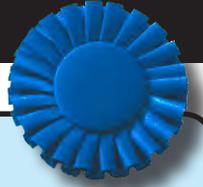
Flowing water is an important part of nature. Find it in a large river or a small stream. There is so much life to discover in the water and along the water's edge.

Follow the color-by-number code below to reveal who lives in a river habitat.

1=green 2=light green 3=blue 4=light blue 5=brown 6=orange 7=gray 8=tan or yellow



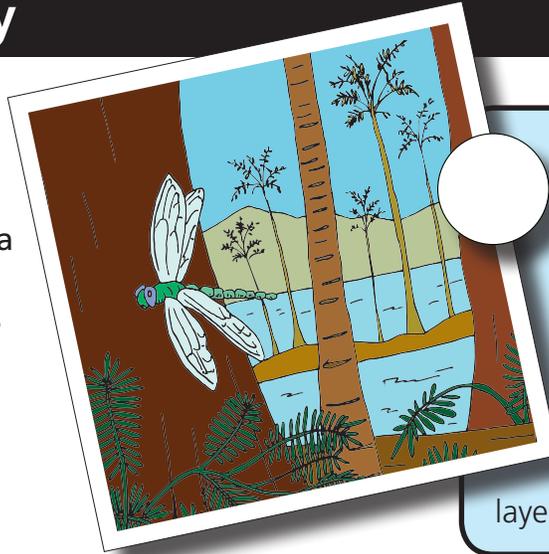
Rockin' Geology



Don't be fooled by its name, for the New River is one of the world's older rivers. How do geologists tell the age of a river? Younger rivers usually contain rapids and waterfalls that carve deep, V-shaped gorges, while older rivers slowly meander across wide, flat floodplains. The New River has characteristics of both ages and continues to cut away at the land. This is a place of geologic change!

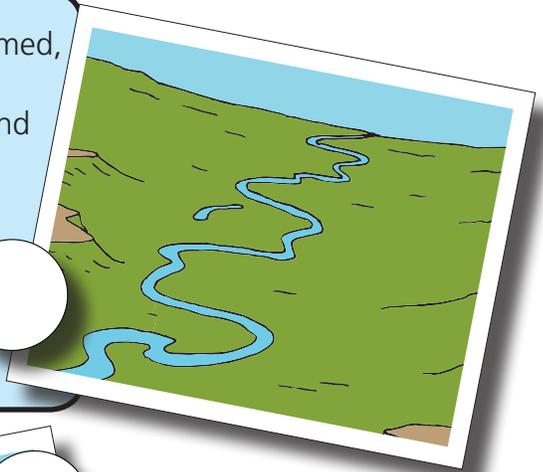
Put these geologic events in the order they occurred. Mark 1 as the oldest event in time and 5 as the youngest (today).

Geology Illustrations by David Bierl

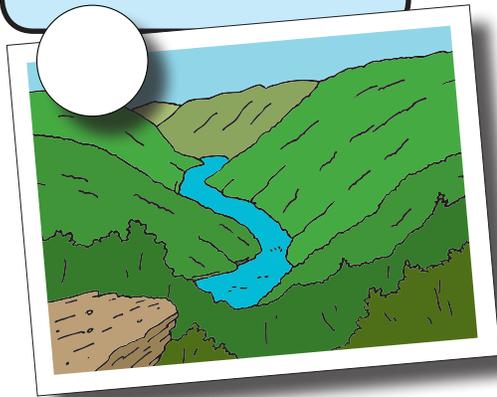


After the first mountains rose, streams flowed down the mountainsides. Water collected in the bottom lands. Rich in plants, swamps formed here. (Millions of years later, the remains of these swamps became the hard layers of coal people use today.)

Even after the swamps formed, water still carved away the first mountains. All that sand and rock (sediment) finally covered the swamps, but water still moved here. The Teays River flowed north across the now flat bottom lands.

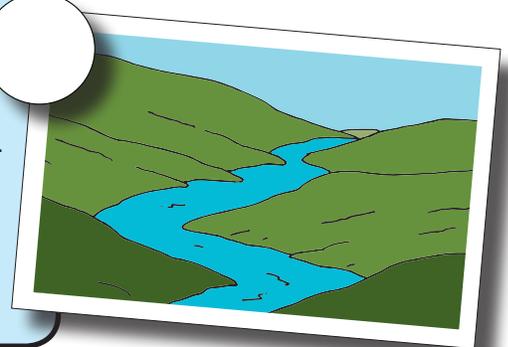


Today known as the New River, this powerful waterway continues to carve one of the largest and deepest gorges in the Appalachian Mountains.



The first Appalachian Mountains uplifted when the African and North American plates collided.

Then the mountains started to grow again, building the Appalachian Mountains we know now. This happened so slowly that the Teays River was able to cut across the emerging ridges.



Starry Starry Night

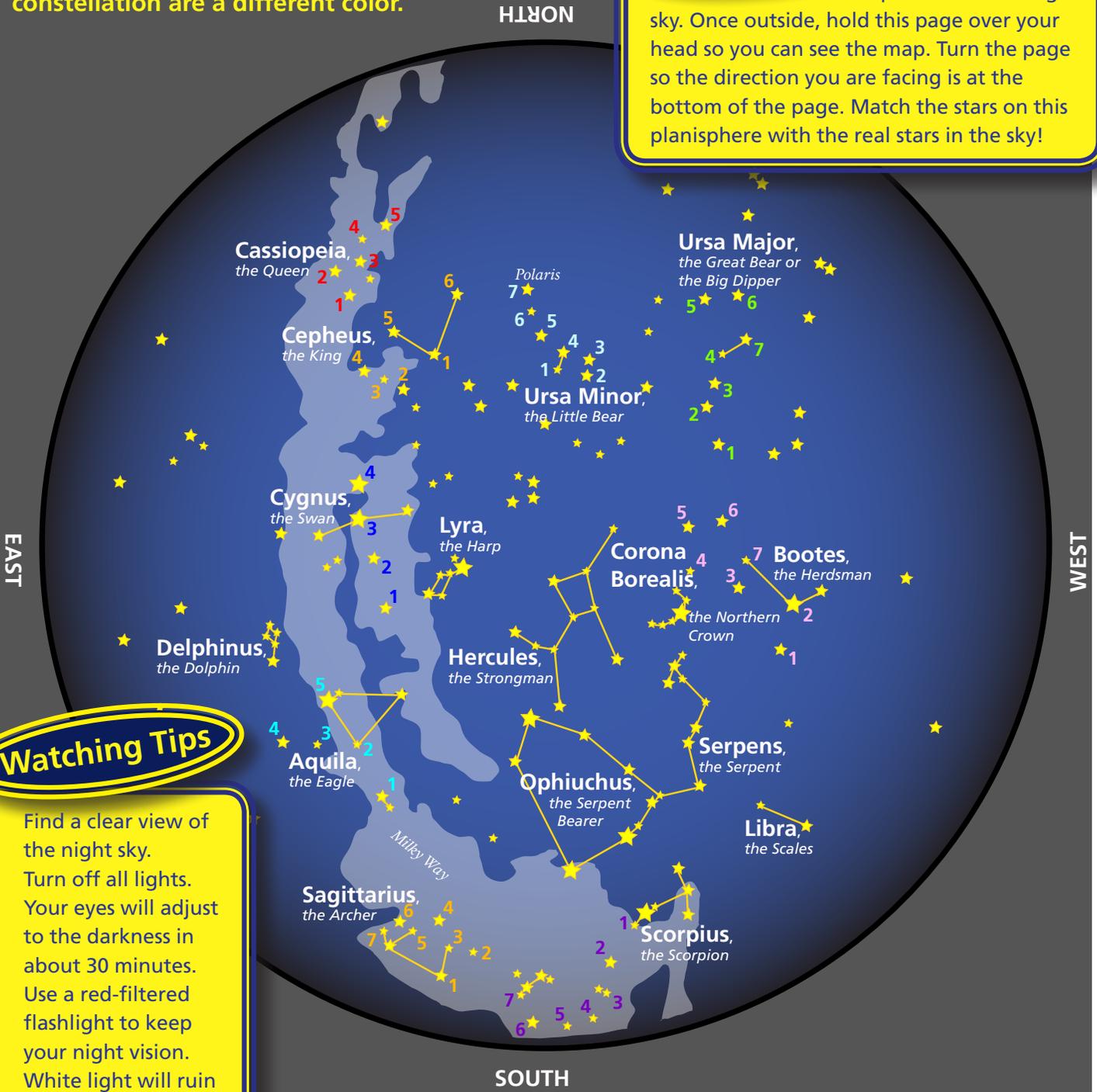
One of the park's best shows is the night sky. Look for patterns in the stars, called constellations. A planisphere, a star map, is a useful tool.

Connect the numbered stars below to discover common summer constellations (just like connect the dots). The numbers for each constellation are a different color.



Summer Star Map

Use this page to see star patterns in the night sky. Once outside, hold this page over your head so you can see the map. Turn the page so the direction you are facing is at the bottom of the page. Match the stars on this planisphere with the real stars in the sky!



Watching Tips

- Find a clear view of the night sky.
- Turn off all lights. Your eyes will adjust to the darkness in about 30 minutes.
- Use a red-filtered flashlight to keep your night vision. White light will ruin your night vision.

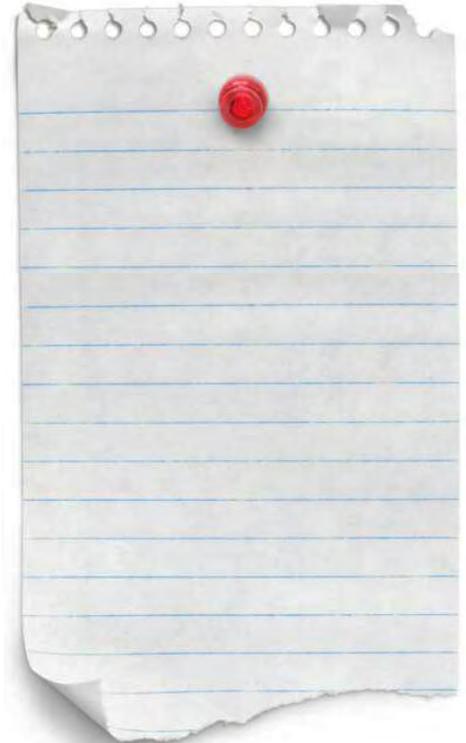
Time Travel



How people traveled through the New River Gorge has changed over time. The area's earliest people traveled by foot or on horseback, but machines have aided our locomotion for over 100 years now.

Figuring out how long it takes to get from one place to another can be useful as you plan your next park adventure. Use the equations below to see if you can calculate the average time it took these New River Gorge travelers of the past to get from one place to another.

Note Pad for Your Calculations
(It's OK to use a calculator if you want.)



1755 Walk Home Through Wilderness
Frontierswoman Mary Draper Ingles escaped from Shawnee captivity and made her way home by following the major rivers. How many miles a day did Mary likely walk?
 $400 \text{ miles} \div 30 \text{ days} = \underline{\hspace{2cm}}$ miles per day

1857 Ride a Stagecoach
How long did it take to ride across the wild New River Gorge area in a stagecoach? (Travel time between White Sulphur Springs and Charleston along the Midland Trail / James River & Kanawha Turnpike.)
 $115 \text{ miles} \div 5 \text{ miles per day} = \underline{\hspace{2cm}}$ travel days

1925 Drive Fayette Station Road
How long did it take to drive across the New River Gorge in a Model-T Ford?
 $8 \text{ miles} \div 10 \text{ mph} = \underline{\hspace{2cm}}$ hour X
60 minutes per hour = $\underline{\hspace{2cm}}$ minutes

1947 Ride a Passenger Train
How long did it take to ride a passenger train from Thurmond to Hinton? (This time does include the 30 minute stop at the depot in Prince.)
 $34 \text{ miles} \div \text{average train speed of } 32 \text{ mph} = \underline{\hspace{2cm}}$ hours

1981 Raft the Lower New River
How long did it take to raft the river from Thurmond to Fayette Station in the spring? (This is an average time, as water speeds vary with water levels.)
 $15 \text{ miles} \div 3 \text{ mph} = \underline{\hspace{2cm}}$ hours

Bonus Present Day
Cross the New River Gorge Bridge in a Car
Speed limit on the New River Gorge Bridge (WV Route 19) is 65 mile per hour, which is equal to 95 feet per second. How long does it take to drive across the New River Gorge Bridge in a modern car?
$$\frac{3030 \text{ feet}}{1} * \frac{1 \text{ second}}{95 \text{ feet}} = \underline{\hspace{2cm}} \text{ seconds}$$

Coal Mining Mix-up



Coal was “king” in the New River Gorge for over eighty years. People came from near and far to work in the coal mines and build area communities around 1900.

Use the **Decoder Key** below to discover more about the park’s rich coal mining history.

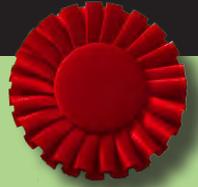


For many years the _____ was a major
 14 5 23 18 9 22 5 18 7 15 18 7 5
 supplier of the primary _____ source for the industrial world,
 5 14 5 18 7 25
 _____. With the completion of the _____ &
 3 15 1 12 3 8 5 19 1 16 5 1 11 5
 _____ Railway in 1873, over sixty _____ sprang up
 15 8 9 15 3 15 1 12 20 15 23 14 19
 in the New River Gorge, including _____, _____ and
 11 1 25 13 15 15 18 19 5 23 5 12 12
 _____. The heyday of coal mining along the New River
 14 21 20 20 1 12 12 2 21 18 7
 lasted half a _____ and provided _____ for thousands of
 3 5 14 20 21 18 25 10 15 2 19
 _____ and _____.
 1 13 5 18 9 3 1 14 19 9 13 13 9 7 18 1 14 20 19

Decoder Key

1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
14	15	16	17	18	19	20	21	22	23	24	25	26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z

Play It Safe!

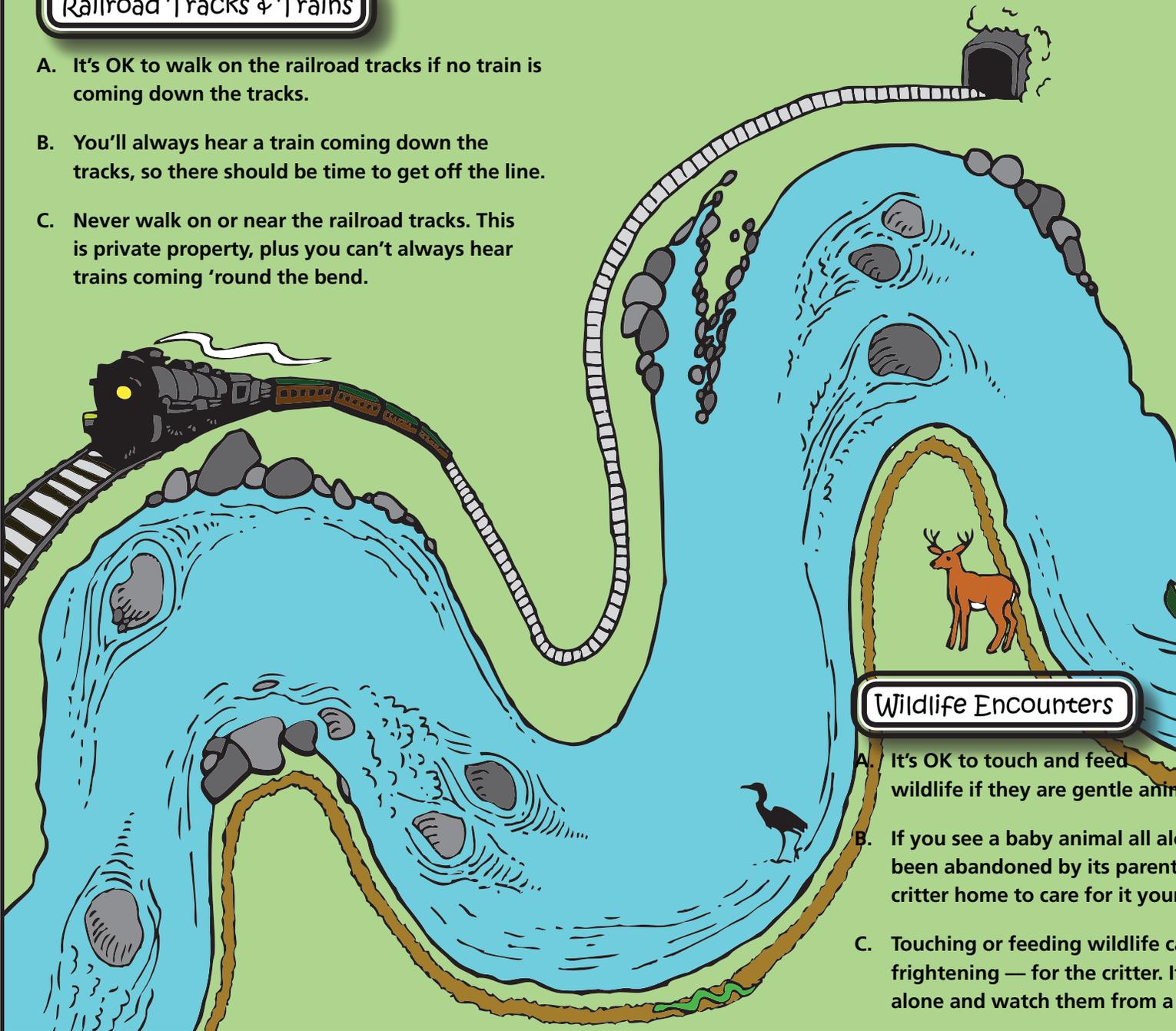


Exploring parks is exciting! To keep the fun in these adventures it is smart to think safety first. Smart choices ensure adventures remain enjoyable and lessen impacts on natural and historic resources protected at the site.

Pick out the smartest safety tip for each adventure below by circling the best choice for each activity. There is only one safe choice listed per topic; the other actions should not be taken.

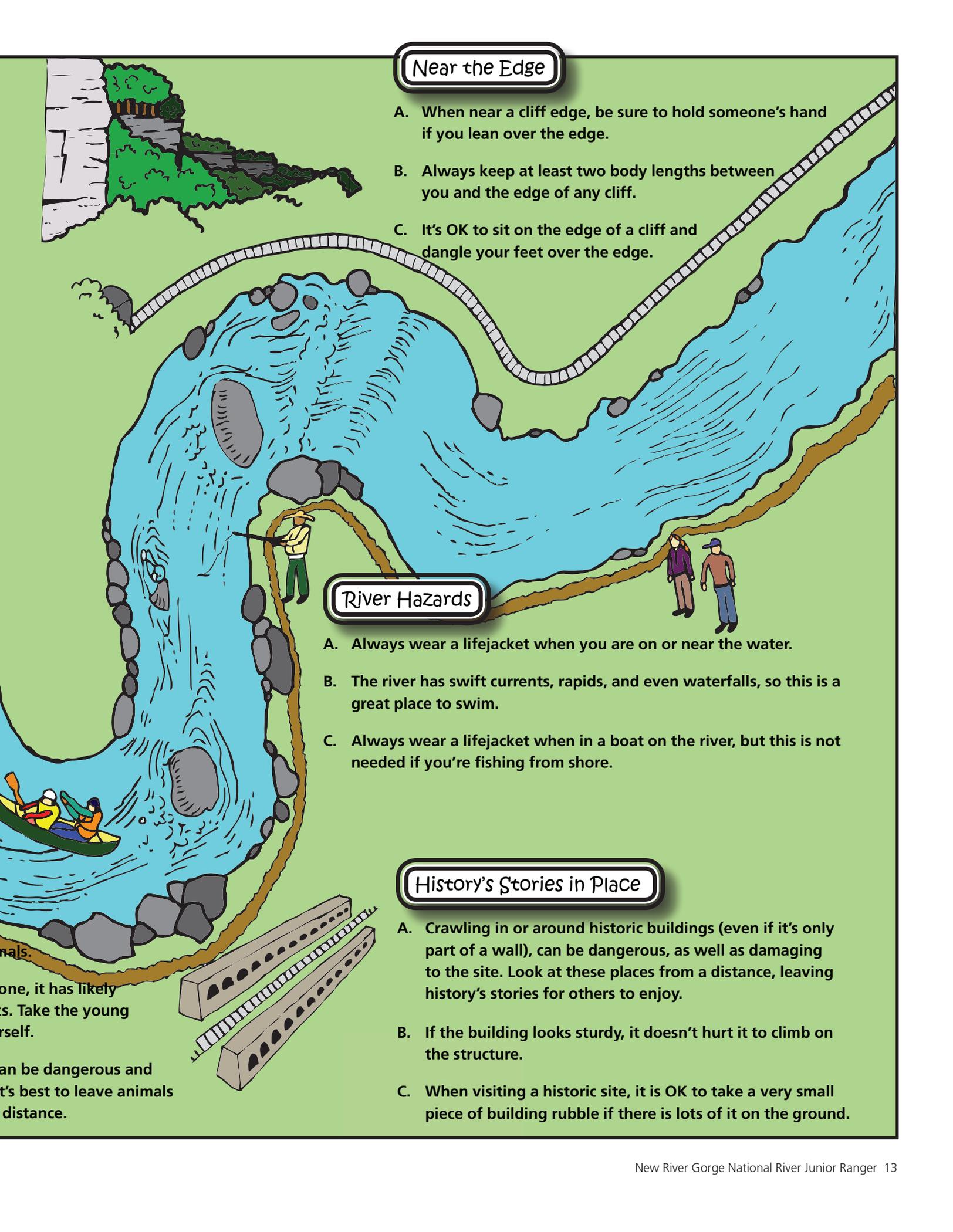
Railroad Tracks & Trains

- A. It's OK to walk on the railroad tracks if no train is coming down the tracks.
- B. You'll always hear a train coming down the tracks, so there should be time to get off the line.
- C. Never walk on or near the railroad tracks. This is private property, plus you can't always hear trains coming 'round the bend.



Wildlife Encounters

- A. It's OK to touch and feed wildlife if they are gentle animals.
- B. If you see a baby animal all alone, you should take it home to care for it yourself.
- C. Touching or feeding wildlife can be frightening — for the critter. It's best to observe them from a distance and watch them from a safe place.

The illustration shows a winding river with a waterfall on the left. A stone bridge crosses the river in the upper right. A person is fishing from the bank near the waterfall, and two people are kayaking in the lower left. Two more people are standing on the bank to the right. The background is a light green field.

Near the Edge

- A. When near a cliff edge, be sure to hold someone's hand if you lean over the edge.
- B. Always keep at least two body lengths between you and the edge of any cliff.
- C. It's OK to sit on the edge of a cliff and dangle your feet over the edge.

River Hazards

- A. Always wear a lifejacket when you are on or near the water.
- B. The river has swift currents, rapids, and even waterfalls, so this is a great place to swim.
- C. Always wear a lifejacket when in a boat on the river, but this is not needed if you're fishing from shore.

History's Stories in Place

- A. Crawling in or around historic buildings (even if it's only part of a wall), can be dangerous, as well as damaging to the site. Look at these places from a distance, leaving history's stories for others to enjoy.
- B. If the building looks sturdy, it doesn't hurt it to climb on the structure.
- C. When visiting a historic site, it is OK to take a very small piece of building rubble if there is lots of it on the ground.

Leave No Trace and You



We each visit national parks for different reasons. People hike, boat, camp, explore nature and history, and more in these parks. With so much to see and do at each site, all of us can take easy steps to help care for these special places by practicing Leave No Trace Outdoor Ethics.

Take the smartest outdoor ethics action for each activity example below.

These seven guiding principles of outdoor ethics can help us take wise actions when playing outdoors.

- Know Before You Go
(Plan Ahead and Prepare)
- Choose the Right Path
(Travel and Camp on Durable Surfaces)
- Trash Your Trash (Dispose of Waste Properly)
- Leave What You Find
- Be Careful With Fire
(Minimize Campfire Impacts)
- Respect Wildlife
- Be Kind to Other Visitors
(Be Considerate of Other Visitors)



Trash Your Trash

(Dispose of Waste Properly)

You and your family have a picnic in the park, but there isn't a trash can at that site. What is the best thing to do with your picnic food scraps and trash?

Leave What You Find

You see a beautiful wildflower along a park trail. Circle ALL the best ways to share this plant with others, ways to "take it with you" without really taking the wildflower away from its natural habitat.



Take a photo



Pick the flower



Draw a picture



Take others to it

Respect Wildlife

You see a fawn (baby deer) in the park. No adult deer seems to be around. What should you do? Check the best choice for this young animal.

- Take the fawn home.
- Leave the fawn alone.
- Feed the fawn and hold it until the mother deer comes back.



Learn more about outdoor ethics techniques at the Leave No Trace Center for Outdoor Ethics www.LNT.org 1-800-332-4100

Take a Hike

Choose one of the trails in the park to hike with your family. Keep track of cool things you see along the way, plus draw a picture of one of nature's wonders. Have a great hike!

Trail Name: _____



Discovery Journal

Make your hike a discovery adventure. Check off the things you see on your walk, plus add more details if you like.

historic building _____

bird _____

animal _____

insect _____

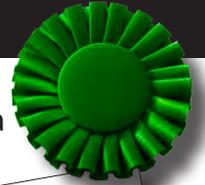
tree _____

flower _____

Nature Sketchbook

Draw a picture of a plant or animal that you saw on your hike.

Visit the Visitor Centers



Stop by at least one New River Gorge National River visitor center. Explore the area and answer that site's questions below. Get the passport cancellation stamp too.

National Park Service photos.

Canyon Rim Visitor Center

(open year-round) *See exhibits inside the visitor center.

1. List two pieces of equipment used for a safe river trip?

A) _____

B) _____

2. The flat-topped plateau of the New River Gorge is part of what eastern U.S. mountain range? (circle one)

A) Appalachian

B) Rocky

C) Sierra-Nevada

D) Cascade



Thurmond Depot Visitor Center

(open summer) *See inside and outside exhibits near the visitor center.

1. Thurmond depot was once one of the busiest passenger train stops in the New River Gorge. In the booming year of 1910, this Chesapeake & Ohio (C & O) station served how many passengers? (circle one)

A) 21,000

B) 15,000

C) 75,000

D) 120,000

2. The C & O Railway carried freight and passenger trains. Some used the tracks in secret, like hobos. Draw a line to match the codes left by hobos to send messages to one another:



Hit the
Road Quick

Beware
of Dog

Freshwater
Safe Camp

Police

Good Place to
Catch a Train

Kind
Lady



Search the Gauley

Gauley River National Recreation Area is a nearby National Park Service site. The Gauley River is well known as one of America's most challenging rivers for whitewater boating, with a six week season each autumn. Find exciting elements of a local whitewater adventure in this word search.



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

Find names of river rapids:

- | | |
|---------------|--------------|
| Insignificant | Lost Paddle |
| Iron Ring | Pillow Rock |
| Koontz Flume | Sweets Falls |

Find this river gear:

- | | |
|------------|-----------|
| helmet | paddle |
| lifejacket | raft |
| kayak | throw bag |

Find these river features:

- | | |
|---------|----------|
| current | rapid |
| eddy | rock |
| put-in | take-out |

BONUS: find this river's name

The BLUE's Clues

Bluestone National Scenic River is another nearby National Park Service site. The Bluestone River Gorge is home to many different animals. Each critter may leave a clue to their presence, like tracks, scat (poop), nest, and more. Draw a line to connect the animal to its tracks.



Mink, opossum, and raccoon illustrations © Zachery Zdinak

Beaver

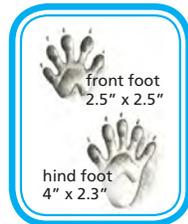
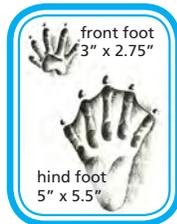
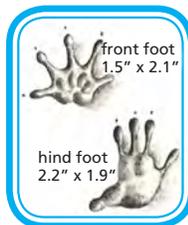


TIP: big back feet are webbed for swimming

Mink



TIP: little webbing on all four feet for swimming



Opossum

TIP: hand-like with opposable thumbs, just like people



Raccoon

TIP: toes bulbous on the ends

Arrowhead: National Park Service Symbol



Wherever you see this symbol in America, know that you are in a special place, a National Park Service site. This symbol shows what is preserved in parks. See the parts of the arrowhead below.



arrowhead = people stories



bison = animals



lake = water



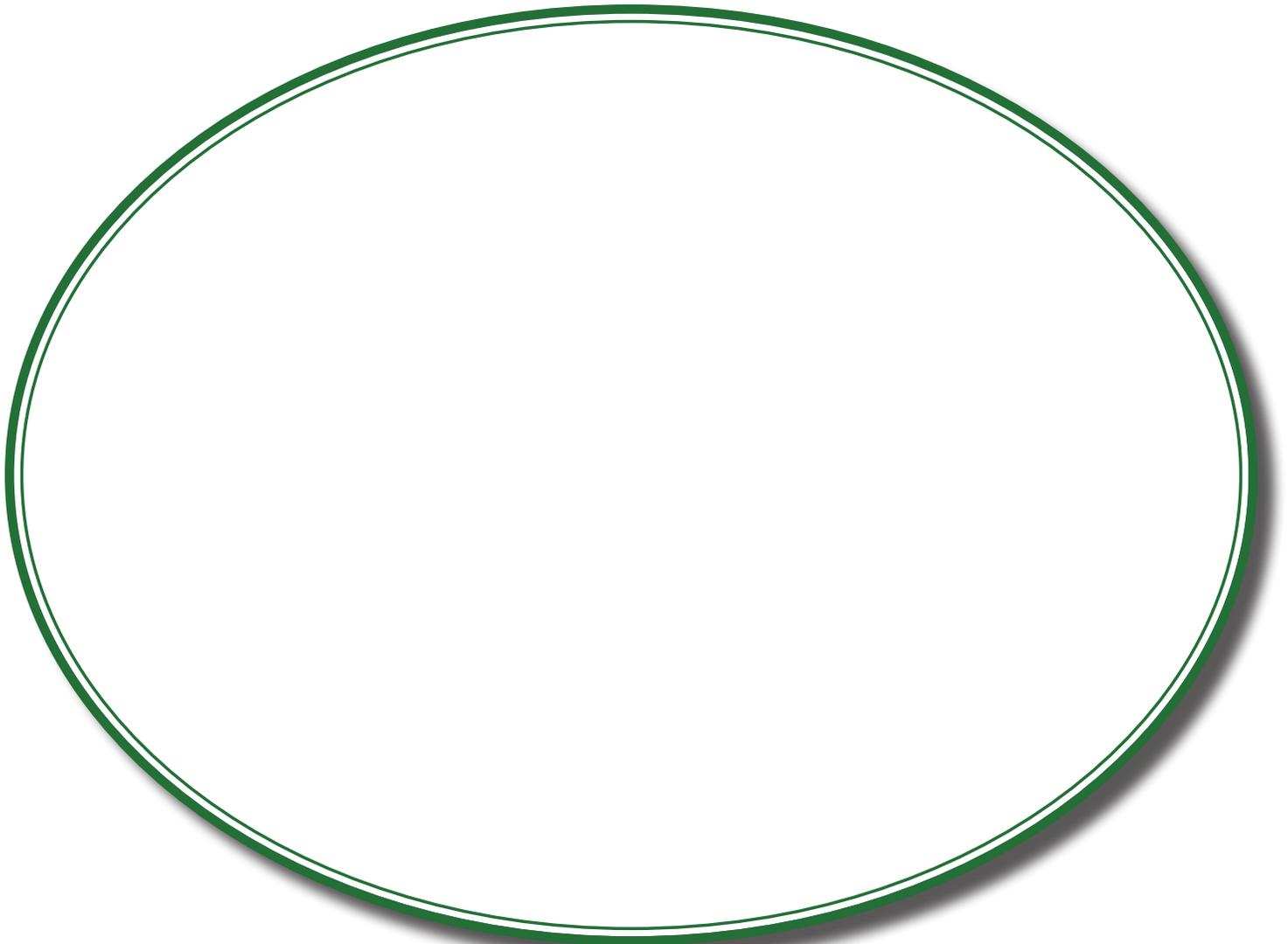
tree = plants



mountain = land

My New River Gorge National River Symbol:

What things are protected in New River Gorge National River? What are some of your favorite parts of this park? Think about this and design a symbol for this National Park Service site, something that would let others know what is special about this park.



Whereizzit?



National parks protect America's scenery, natural and historic objects, and wildlife. These parks are places to have fun, yet protect these resources so people of the future can enjoy these special places too. There are over 400 National Park Service sites in America.

Use the clues below to see what is special about these parks. Put the park number in its clue box.

Photos by Dave Bieri, Bill Dowling, and National Park Service staff.



Park Clues

What park has North America's highest mountain? It has grizzly bears and caribou too.

What park has a statue that welcomed immigrants to America? It was a gift from the people of France.

What park was home to the ancient Anasazi people? They built and lived in cliffside houses.

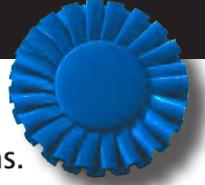
What park is home to the world's biggest trees? Some trees measure over 100 feet in circumference at the base.

What park celebrates life on the country's eastern shore? It has lighthouses, sea turtles, water birds, and more.

What park is where one of the largest battles of the Civil War took place? Lincoln gave a famous "address" here.

What park has America's deepest canyon? It is cut by the Colorado River.

Fun on the Job



Park staff at New River Gorge National River have different jobs. They all work together to protect and preserve park resources for present and future generations.

Draw a line to connect the National Park Service employee to their job.

National Park Service photos.



Natural Resource Management

Performs the administrative duties of running a park (personnel, budget, etc.).



Administration

Educates visitors about park resources through guided hikes, talks, school programs, publications, and displays.



Fire Management

Enforces regulations and ensures visitor safety by administering first-aid and handling search and rescue operations.



Visitor Protection

Identifies and studies the park's natural resources and determines ways to best protect these resources.



Interpretation

Patrols the river, ensuring that park visitors are being safe and assist boaters who need help.



Maintenance

Fights wildfires in the park and manages prescribed burns.



Cultural Resource Management

Maintains the park's structures, roads, and trails, and keeps the park clean.



River Ranger

Studies the park's people history and determines ways to best protect cultural sites.

Attend a Ranger Program

Attend a ranger-led program or activity. Write down three things that you learned. If a program is not scheduled during your visit, watch the park movie at either Canyon Rim Visitor Center or Sandstone Visitor Center and write down what you learned about the park from the film.

Name of the program: _____

Ranger signature: _____

Three things I learned during this program:

1. _____
2. _____
3. _____



National Park Service photo.

Interview a Ranger

Talk with a park ranger. Ask questions about their job, their school background, or the park. Write down the questions answers below. Who knows, you may become a park ranger some day.

Name of ranger: _____

Question #1: _____

Ranger answer: _____

Question #2: _____

Ranger answer: _____

Question #3: _____

Ranger answer: _____





Junior Ranger

New River Gorge National River

This certifies that

Junior Ranger Pledge

As a Junior Ranger, I promise to:

- Learn about parks and share what I've learned with others.
- Help keep parks clean.
- Leave all natural and historic things as I find them.

has successfully completed all the requirements to become a New River Gorge National River Junior Ranger and pledges to protect all national parks for future generations.

Park Ranger signature

Date



Name: _____

Address: _____

Place
Stamps
Here



**National Park Service
U.S. Department of the Interior**

**New River Gorge National River
P.O. Box 246
Glen Jean, WV 25846**