Junior Ranger

Oregon Caves National Monument

National Park Service
U.S. Department of Interior

My Name is

_____

Townsend

Ages 7-10

WILL YOU ACCEPT THE JUNIOR RANGER CHALLENGE

Oregon Caves NATIONAL MONUMENT

We invite you to explore Oregon Caves National Monument!

Here is a chance to discover its habitats and old growth forest, its bats and cave critters, its geology and fossils, its people and their history, and learn about caving safely. Please follow these directions and you'll be on your way to becoming a Junior Ranger!

The Townsend Junior Ranger Booklet is intended for ages 7 to 10. There are three ways to become a Junior Ranger. Just complete one of the following three choices:

Do three activities in this book and attend a cave tour.

OR ***Do four activities in this book and hike a trail or attend a ranger program.***

OR ***Do five activities in this book.***

What is a Townsend's Big-eared bat?

A Townsend's Big-eared bat *(Corynorhinus townsendii)* is a flying mammal that likes to feed on moths and other insects. About 55% of the bats that hibernate in Oregon Caves National Monument are Townsend's Big-eared bats. During hibernation, the long ears are laid back or curled up. If disturbed the ears will unfold and be used like antenna. Townsend's Big-eared bats wake up during hibernation and move to other parts of the cave.

Oregon Caves National Monument
19000 Caves Highway
Cave Junction, OR 97523
(541)592-2100

This booklet was printed on recycled paper with soy based inks. Printing of the booklet was made possible by a grant from the Natural History Association and from your generous donations.

Geology

Label the cave formations on the picture.

WHAT ARE THEY CALLED

Stalactite
a formation hanging down from the ceiling

Stalagmite
a formation building up from the ground

Column
a stalactite which has joined a stalagmite

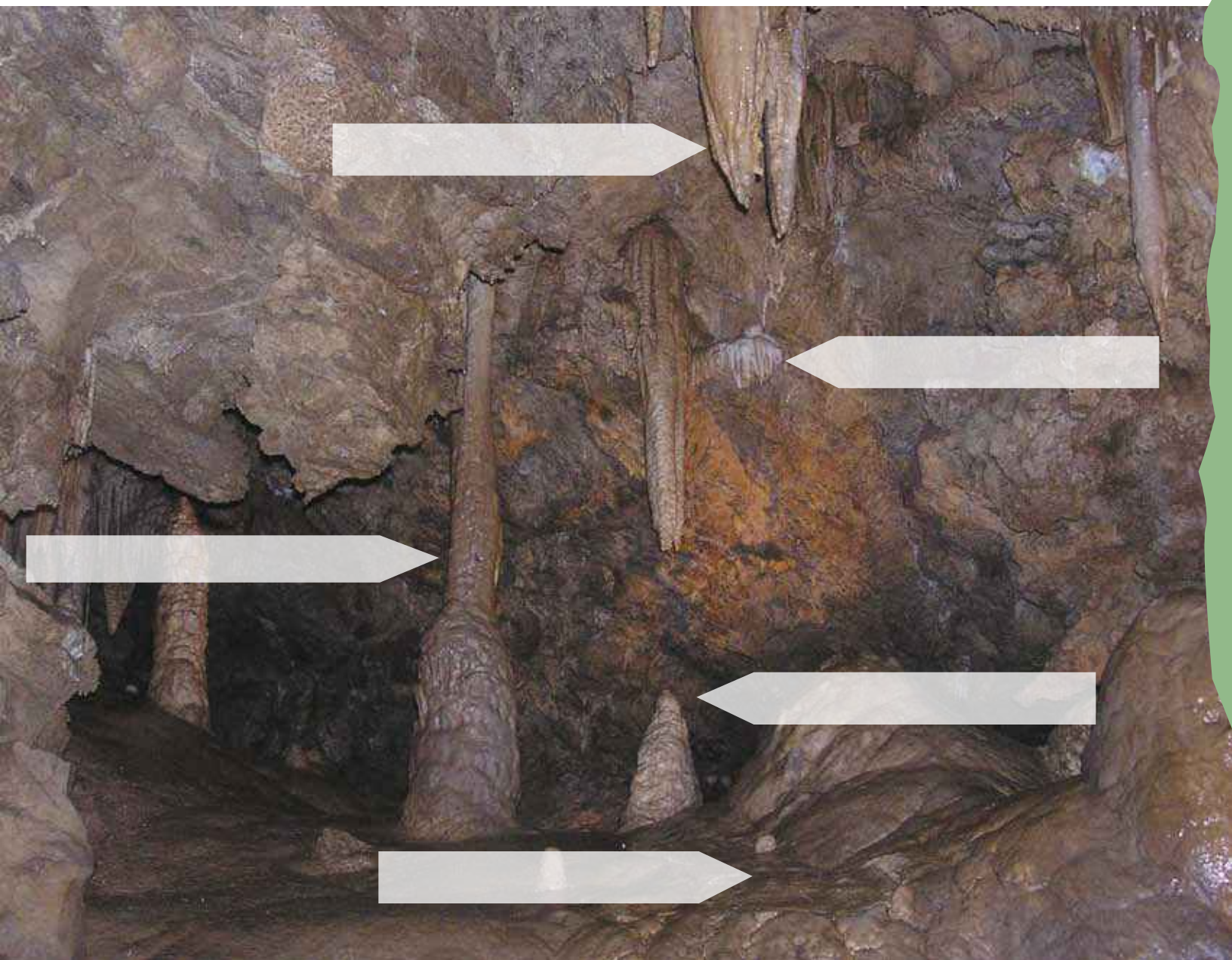
Soda Straw
a hollow stalactite

Flowstone
a formation which flows over rocks

Drapery
a formation which hangs down like curtains

Bacon
a formation which has stripes like bacon

Popcorn
lumps and bumps of calcite/limestone



WHAT IS IN YOUR COMMUNITY

Watershed – Old Growth Forest

Many park rangers are naturalists. Park rangers learn about plants and animals to understand how to protect them. You can become a naturalist by learning to look closely at the plants, animals, and natural objects around you.

Choose a study area safely away from the road. Sit down, extend your arms, and look closely at the community within your reach.

Notice the signs of life and objects around you – animal tracks, flowers, leaves, insects, rocks, soil, and water. See how some things provide food or shelter for others. Try to understand how plants, animals, and natural objects are connected to each other.

Use this space to draw three things that are connected to each other in the natural community you have studied. Look through the visitor center to see if you can identify the three things you have drawn.

Community – plants or animals in a given area that depend on each other.

Name some things you are connected with in your own community at home.

People & History

CAN YOU FOLLOW THE MAP

Scavenger Hunt

Follow the directions and search for the answer to each question.

1. Go to the cave entrance.

Read the two plaques on the left side. Which President proclaimed us a National Monument? _____ What year did it become a National Monument?_____

2. Walk down the stairs.

Cross the plaza and head toward the corner of the Chateau. Find the plaque on a large rock. When was the Chateau declared a National Historic Landmark?

_____

3. Go into the Chateau.

Find the carving of Elijah Davidson looking out the lobby window. Where did you find him?

_____

4. Visit the biography wall.

It is in the Chateau lobby, next to the antique phone booth. Who designed and built the Chateau?

_____

5. Visit the front desk of the Chateau.

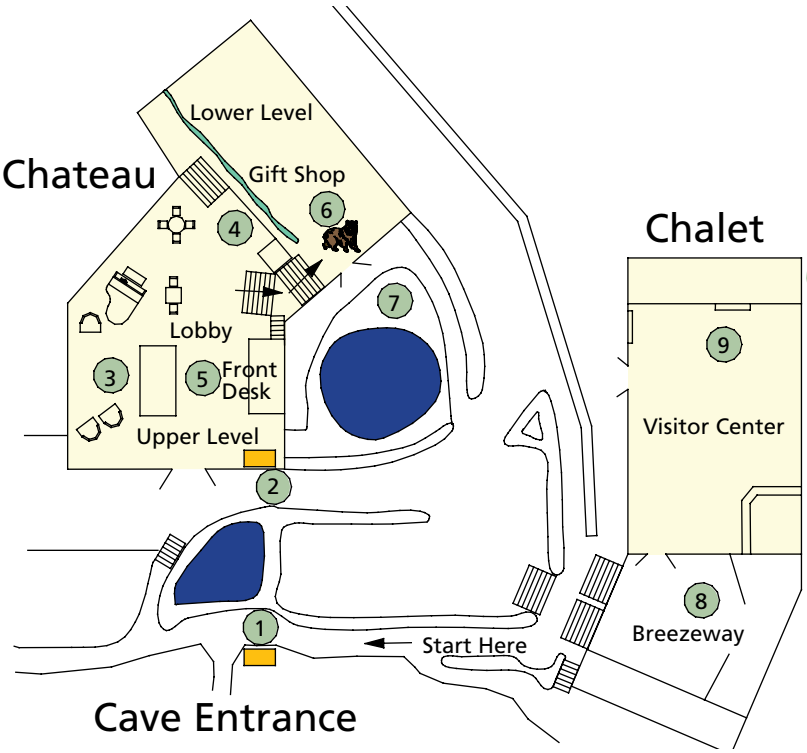
Ask when the Chateau was completed. When was it completed? _____

6. Find the bear in the Gift Shop.

Whose picture is on it? _____

Look around. Where do you see Cave Creek?

_____



7. Leave the Chateau by the Gift Shop door.

Go up the sloping walkway toward the Visitor Center stairs. Count the waterfalls along the way. How many waterfalls are there? _____

8. Go to the breezeway outside the Visitor Center.

Find the information board with the rocks stuck to it. The types of rocks are listed above each. Choose one and write the type here. _____

9. Go into the Visitor Center.

Study the skulls on the touch table along the back wall. Which one is the biggest?

_____

HOW MANY WILL YOU SEE

Cave Habitats

Cave Critter Habitats

Oregon Caves has several endemic Cave Critters. Endemic means that the animal lives in only one place in the world. These Cave Critters live here in Oregon Caves.

Grylloblattids

are sometimes described as cockroach-crickets, ice-crawlers or rock crawlers. They are related to crickets, cockroaches, termites and earwigs. Grylloblattids are special because their body fluids act as antifreeze.

Harvestmen

are also known as daddy long-legs. They are not a true spider as they do not have silk glands and venom. Harvestmen can self-amputate legs to distract predators. These detached legs may remain twitching for several minutes.

Millipedes

differ from centipedes in that most of their body segments have two legs where centipedes have one. Millipedes have two primary defense mechanisms. They curl into tight balls. They also emit hydrogen cyanide gas that smells like cherries. This gas can burn other insects.

Pseudoscorpions

look like scorpions except they do not have a tail with a stinger. They may have arrived in our Caves by hitchhiking on the legs of flies, harvestmen or other bugs. The pincers are used to grab springtails which are their food.

actual size

actual size

Springtails

can leap about 20 times their body length to get away from the predator. They have a tail-like appendage which they can fold beneath their body and place under tension. When a predator comes near, they can snap the tail against the ground and fly through the air.

Cave Crickets

live underground during the day and go out for food at night. Because they live in the dark, they use their long antenna and legs to feel for predators and prey. Cricket's legs can also be used to hear sound vibrations.

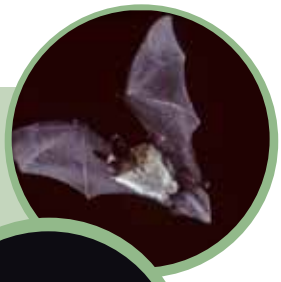
Bat Habitats

Here at Oregon Caves National Monument, we have eight different species of bats which use the dead trees of the old growth forest as their summer homes and the caves as a place to hibernate in the winter.

HOW MANY WILL YOU SEE

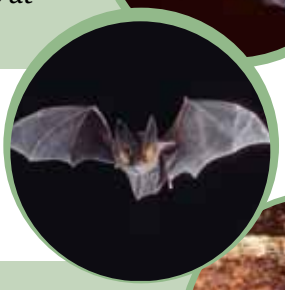
California myotis bat

is the smallest bat that uses our Caves. It weighs between 1 to 2 pennies (3-5 grams). It has a slow jagged flight pattern and hunts along the edges of the forest, over water and in open meadows.



Long-eared myotis bat

likes to roost in rock crevices. It flies slowly as it hunts among the treetops and over ponds. It hunts later in the evening and for longer periods than other bats here at Oregon Caves.



Townsend's Big-eared bat

likes to feed on moths. If the temperature warms up, they will move during hibernation to a place where it remains cold. During hibernation, over half of the bats in our Caves are Townsend's Big-eared.

Big Brown bat

is the largest bat that uses our Caves. It weighs between 5 to 9 pennies (14-21 grams). It will fly on a fairly straight line to its hunting grounds in open areas.

Little Brown bat

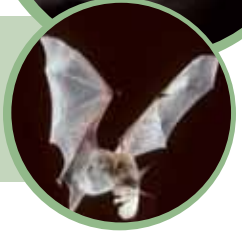
likes to hunt over water and other open areas. It will set a hunting pattern which it will follow over and over again. These bats prefer hot attics for daytime roosts so their babies can grow to adults before they move to their winter roosts.

Long–legged myotis bat

will pursue prey over a long distance through, around and over a forest with both conifers and hardwood trees. They are active throughout the night but hunt the most during the first 3-4 hours of darkness.

Fringed myotis bat

migrates in the spring and autumn. If flies slowly but with grace. It hunts just above the tree tops. These bats will awaken from hibernations periodically through winter.



Yuma myotis bat

lives where there is open water nearby. They hunt just above the surface of streams and ponds.

WHO AM I

Cave Habitats

It's always fun to learn about wildlife.

Using the clues below, solve the riddles and correctly identify the bat or cave critter. You may be surprised by what you discover! Information about bats and cave critters can be found on the two preceding pages. Draw a line from "Who Am I?" to the bat or cave critter and write in the name.

WHO AM I

1. I live in Oregon Caves during the winter.
2. I like moths but will eat other insects.
3. If the temperature changes, I will move to another place to hibernate.
4. Most of the bats here at Oregon Caves are like me.

I am the _____

WHO AM I

1. I am very small.
2. I am called an ice-crawler.
3. My body has antifreeze in it.
4. Crickets, cockroaches, termites and earwigs are some of my relatives.

I am the _____

WHO AM I

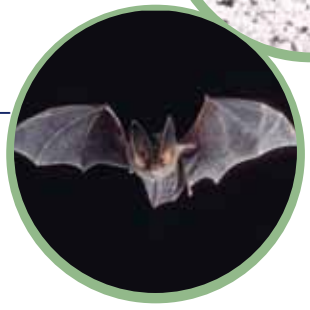
1. I hibernate in the winter.
2. I like to hunt over water.
3. My hunting pattern is the same over and over again.
4. In the summer, I prefer hot attics.

I am the _____

WHO AM I

1. I do not have venom.
2. I have very long legs.
3. My legs can be amputated and grow back.
4. Predators may think that my leg is me so I can get away.

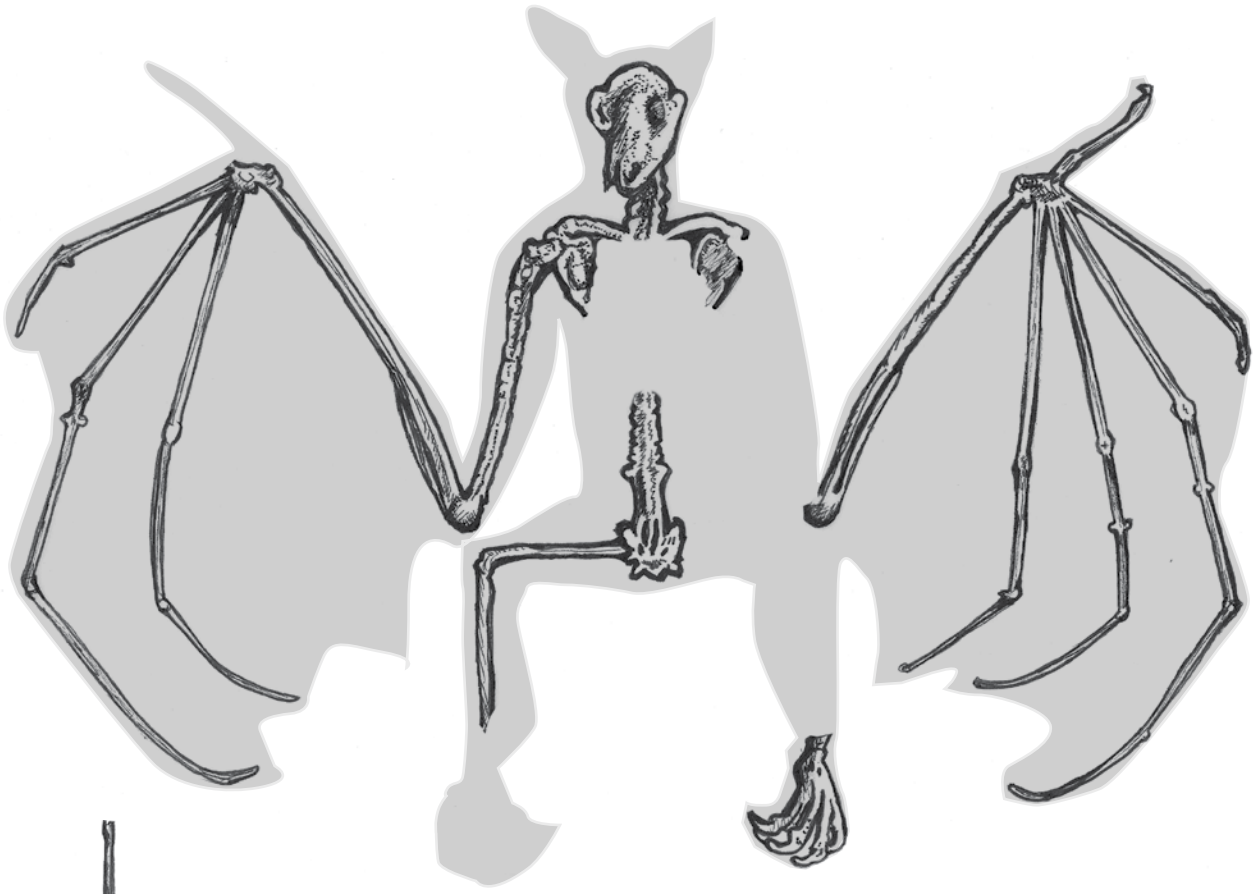
I am the _____



Fossils

WHERE DO THE BONES BELONG

Paleontologists have to be able to identify the bones they find and match them to the correct animal and part of the skeleton. This Townsend's Big-Eared bat is missing a few parts of its skeleton. Can you figure out where each bone belongs? Draw each missing bone or draw a line connecting the bones to the right part of the skeleton.

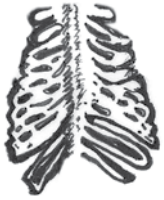


upper arm bone

finger bone

foot bone

leg bones



ribcage

thumb bone

WHAT SUPPLIES SHOULD YOU BRING

Cave & Hiking Safety

Caver's Supply List

If you were to go caving there would be certain supplies you would want to take with you. Circle the supplies that a good caver would take on a wild cave adventure.


chicken


sturdy boots


dog


comb


swim suit


hard hat with light


shorts


experienced caver


overalls


gloves

bubble gum


extra sources of light


rake


couple of friends


water

snacks


sandles


sturdy clothes

first aid kit


pick or axe


toys


20 foot rope


ranger hat

This certifies that

_____

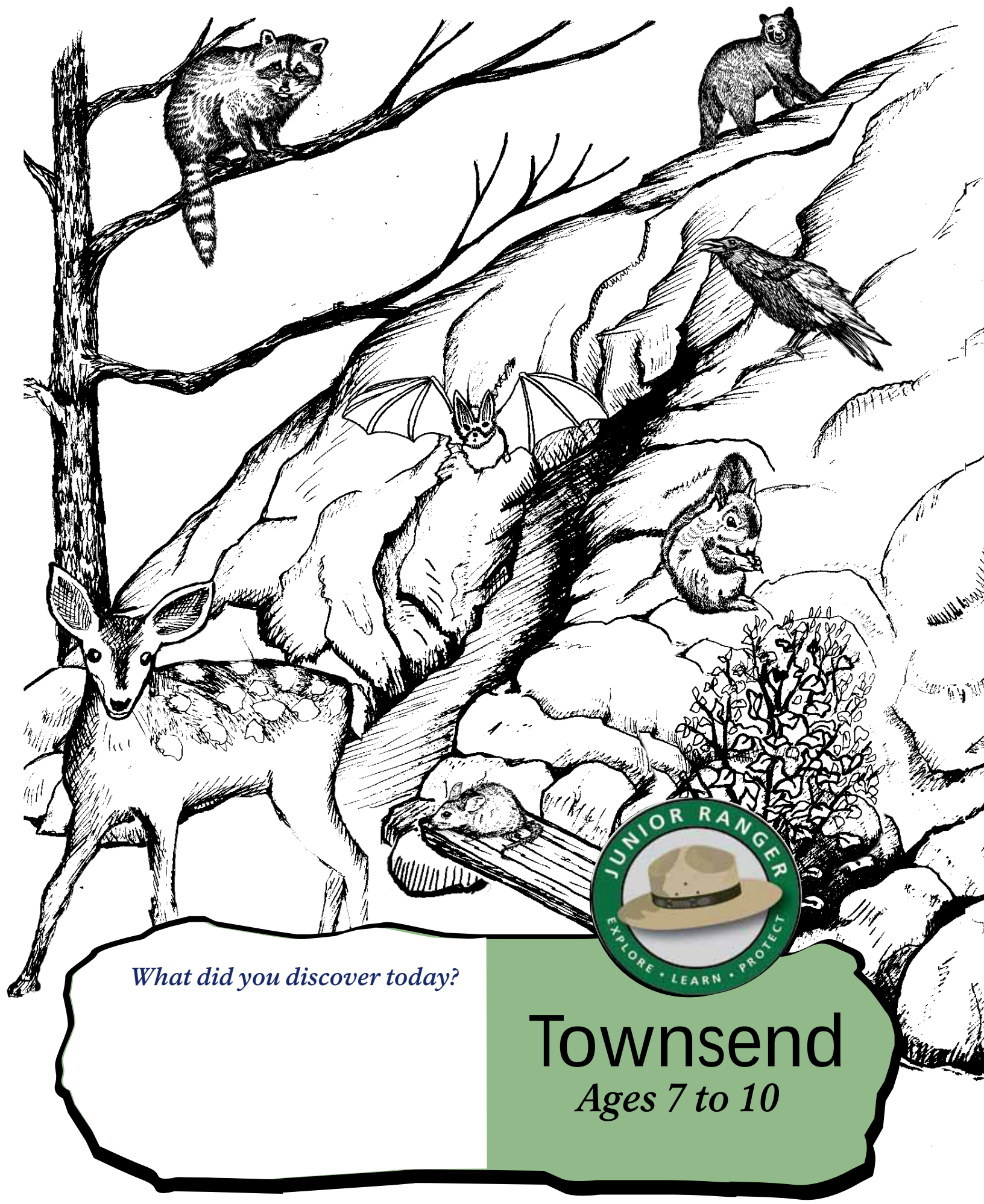
has completed the Junior Ranger Program at
Oregon Caves National Monument
and is hereby considered an
official Junior Ranger.

Given on this _____ day of _____, 20_____

_____
Ranger Signature

Junior Ranger Promise

As a Junior Ranger, I promise to help protect and preserve all of the National Parks and Monuments, my community and the world for everyone to enjoy.



What did you discover today?

Townsend

Ages 7 to 10