### **Craters of the Moon**

National Park Service Bureau of Land Management U.S. Department of the Interior





Craters of the Moon National Monument & Preserve

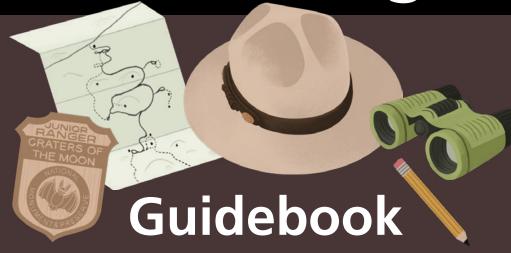






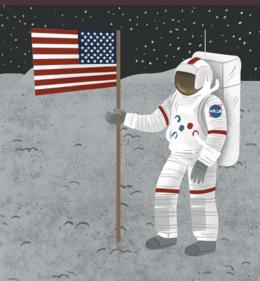


# Junior Ranger









### **Explore, Learn, Protect**

Junior rangers are curious about the world around them and love to learn new things. They help to protect special places, whether it's a faraway national park or their favorite place to play near home.

#### **Become a Junior Ranger!**

Finish as many activities in the guidebook as you can, then circle which level you reached!



**Butterfly Level** 

complete any 3 activities



Nutcracker Level

complete any 6 activities



Pronghorn Level

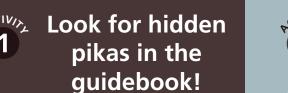
complete all activities

To earn your badge, present your guidebook to a park ranger at the visitor center.

If you finish it at home, mail or email your guidebook to us. Be sure to include a return address so that we can send you a badge!

Mail to: 1266 Craters Loop Road Arco, ID 83213

or email a scanned copy to: crmo\_information@nps.gov





How many did you find? Check the last page for the answer.

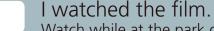
I found



pika!



Watch the park film or hike a park trail.



Watch while at the park or online at go.nps.gov/CratersFilm

I hiked the:

Trail.

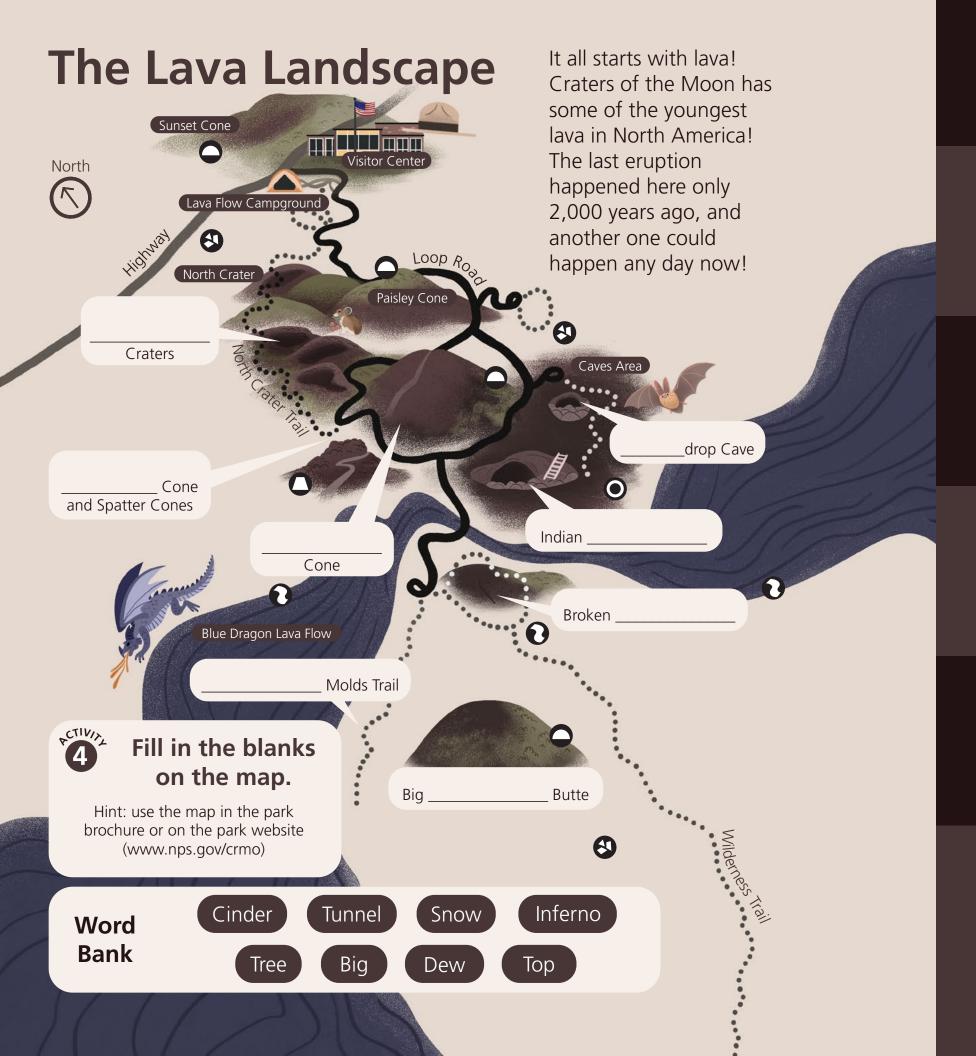
Thank you to the children of Arco and Carey, and to the children of park staff, who helped us to create the Junior Ranger Guidebook.

### **Junior Ranger Essentials**

While you explore Craters of the Moon, leave behind the neat things you find along the way. Snap a picture instead! Remember to take trash with you when you leave. This is called "Leave No Trace."







#### **Sometimes Lava Looks Like Food!**

Learn about the different kinds of lava at Craters of the Moon! Use the symbols on the map to find these features in the park.



#### `A`ā Lava Rock

(Sounds like "Ah-ah")

This sharp lava rock looks like piles of crumbled-up chocolate cookies. It forms when chunks of lava start to cool and become very sticky.



#### Pāhoehoe Lava Rock

(Sounds like "Puh-hoy-hoy")

This smooth lava looks like a melted chocolate bar. It forms after hot, liquid lava flows and cools.



#### **Cinder Cones**

This lava looks like chocolate crisp rice cereal. It forms when lava with gas bubbles shoots high into the air. As the lava falls and quickly cools, piles of cinders can create a cinder cone.



#### **Spatter Cones**

This lava looks like globs of sticky chocolate pudding. It forms during the end of a volcanic eruption, when lava piles up around a central vent.



#### **Lava Tube Caves**

This lava is like a giant stick of black licorice. It forms when the top of a lava river cools and hardens into a crust. When the liquid lava drains or cools, it leaves behind an empty tube!

### Life in the Extreme

The lava is full of life! Craters of the Moon is home to over 750 types of plants and 300 types of animals. Living here isn't easy though! Each plant or animal has special adaptations that help it to live among the lava.



Match the plant or animal to its home!

> Hint: there might be more than one right answer!



These grassy islands are surrounded by a sea of lava. It's easier for some plants to grow here than on the lava.



These mountains are cooler than the lava nearby. Migrating animals can find food and water here.

#### **Limber Pines**

These twisty trees can help animals escape the sun and wind. Pine nuts are a tasty treat too!

#### **Lava Flows**

Small animals can hide from the sun and from predators inside cracks in the lava.

#### **Lava Tube Caves**

It's much cooler down here than on the surface. Nocturnal animals can sleep here during the day.

#### **Cinder Beds**

Rocky cinder beds are hot and dry, without much shade. Only the toughest plants can grow here.

### **Draw yourself!**



During the day, I sleep underground, in trees, or in rock crevices. At night I hunt for insects.



#### marmot

Napping in my rocky burrow helps me stay cool on hot days.



### pronghorn

I migrate through the park with my herd. We travel north of the lava, where it's cooler.



### sagebrush

My roots reach deep into the soil in search of water. I grow best in places without bare lava rock.



#### Clark's nutcracker

My favorite food is pine nuts. Trees are both my home and my pantry.



#### dwarf buckwheat

I can grow in places most other plants can't. In the spring, I create a cinder garden! your name:

Draw a line to the habitats that you explored!

### **Perspectives**

Everyone who has experienced this lava landscape thinks about it differently. What is your view of the Moon?





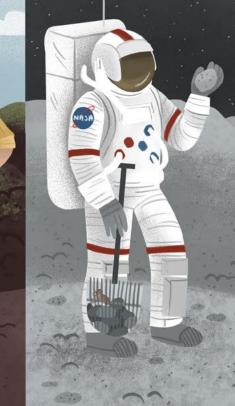
### Send a postcard!

Use the postcard between these pages. Draw or write about your trip to Craters of the Moon. You can even send it to a friend or family member!

### Science on the Moon

In 1969, NASA scientists and astronauts visited Craters of the Moon to prepare for their trip to the actual Moon. They studied the rocks and terrain. Today, NASA continues to do science at the park to be ready for future visits to Mars and beyond!







#### **Be a Scientist**

Find a rock! Make observations about the rock. Remember to put the rock back where you found it.

Where I found the rock:	Is the rock smooth or rough	
What color is the rock?	Is the rock heavy or light	
How big is the rock?	Is the rock the same as or different from the other rocks around it?	
Draw the Rock!	What kind of rock do you think it is?	

## Starlight, Star Bright

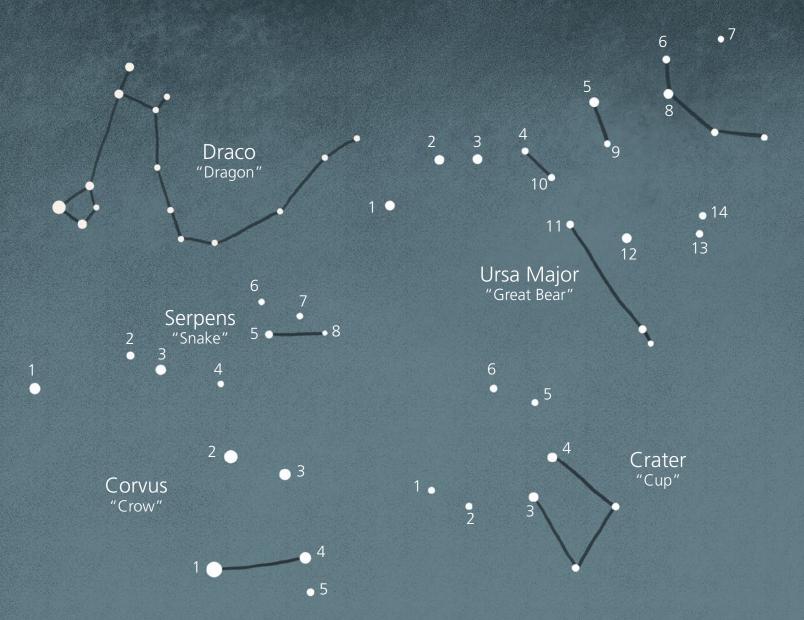
Craters of the Moon not only
protects plants, animals, and
rocks—it also protects dark night
skies! We all need darkness. Dark
nights help some animals to hunt,
hide, or find their way by the stars.
Darkness also allows people to
enjoy more stars in the sky!

#### **Tips for Stargazing**

- Find a really dark sky, away from city lights, tall trees, and buildings.
- Use a red flashlight or headlamp to help with your night vision.
- Use a star chart or stargazing app to help you identify what you see.

**8** Connect the Stars

· Connect the dots to see the constellations in the sky.



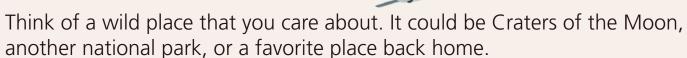


Craters of the Moon was one of the first parks to have a Wilderness area. These are places without roads or buildings, where plants, animals, and their habitats are protected. People benefit from wild places too!





#### **Stewards of the Wilderness**



My place is: \_\_\_\_\_

What makes this place special?

starry skies caves

forests

rocks

mountains

animals

water

(flowers)

clean air

natural sounds

hiking

paddling

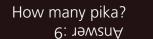
camping

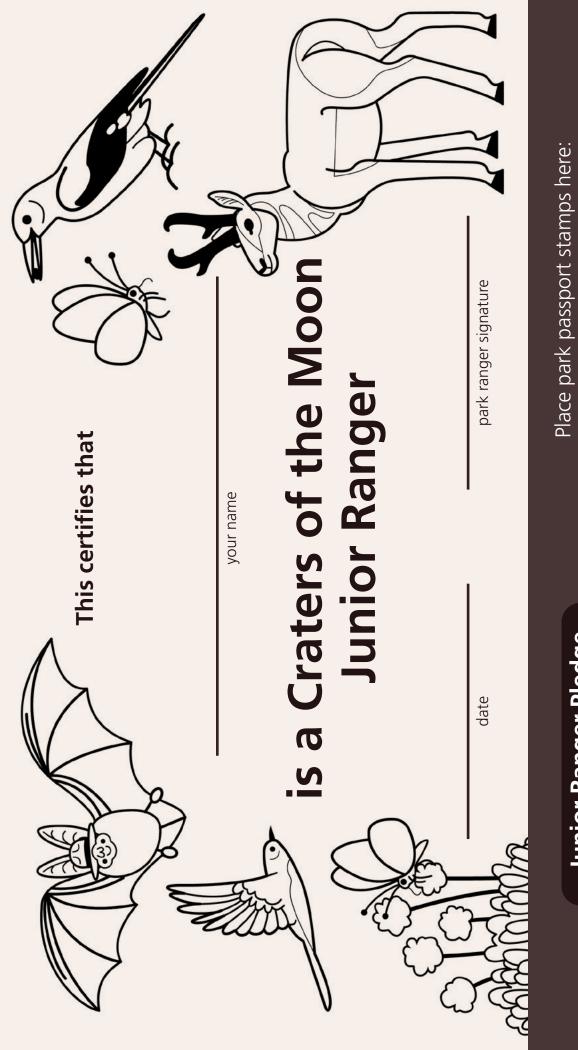
**Swimming** 

other:

How can you help protect your special place? \_\_\_\_\_



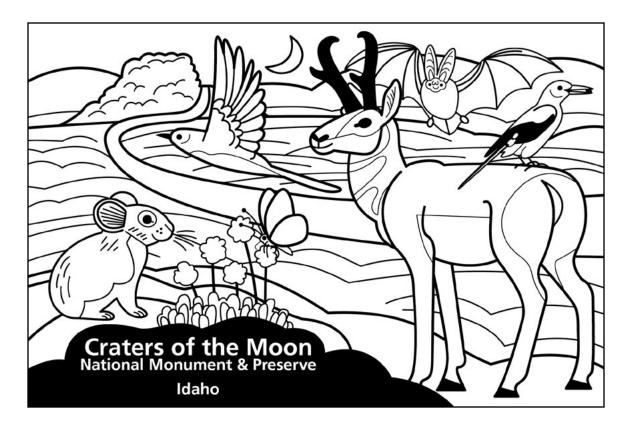




**Junior Ranger Pledge** 

I promise

to stay curious,
to share what I learn with others,
and to leave each place better than I found it.
I LAVA Craters of the Moon!



Hello from Craters of the Moon!		Place Stamp Here
From	To:	
From, Junior Ranger		