

FALL 2016

# *My Public Lands*

## JUNIOR RANGER

**12** Places for  
Your Ultimate  
Public Lands  
Adventures

Spotlight:  
BLM Park Ranger  
Avery Love

**8** Tips for Epic  
Outdoor Photos



Bureau of  
Land Management



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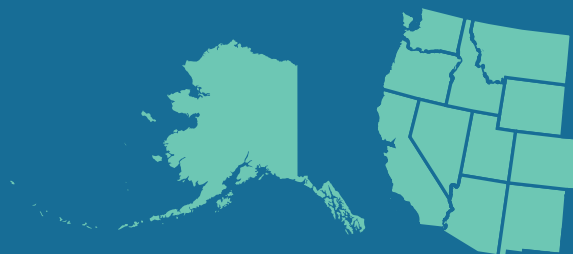
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# Bureau of Land Management



# 245 MILLION ACRES

mostly in 12 western states

NEARLY  
10,000 BLM EMPLOYEES

MORE THAN  
62 MILLION  
PEOPLE

visit BLM-managed lands each year

# Become a Junior Ranger!

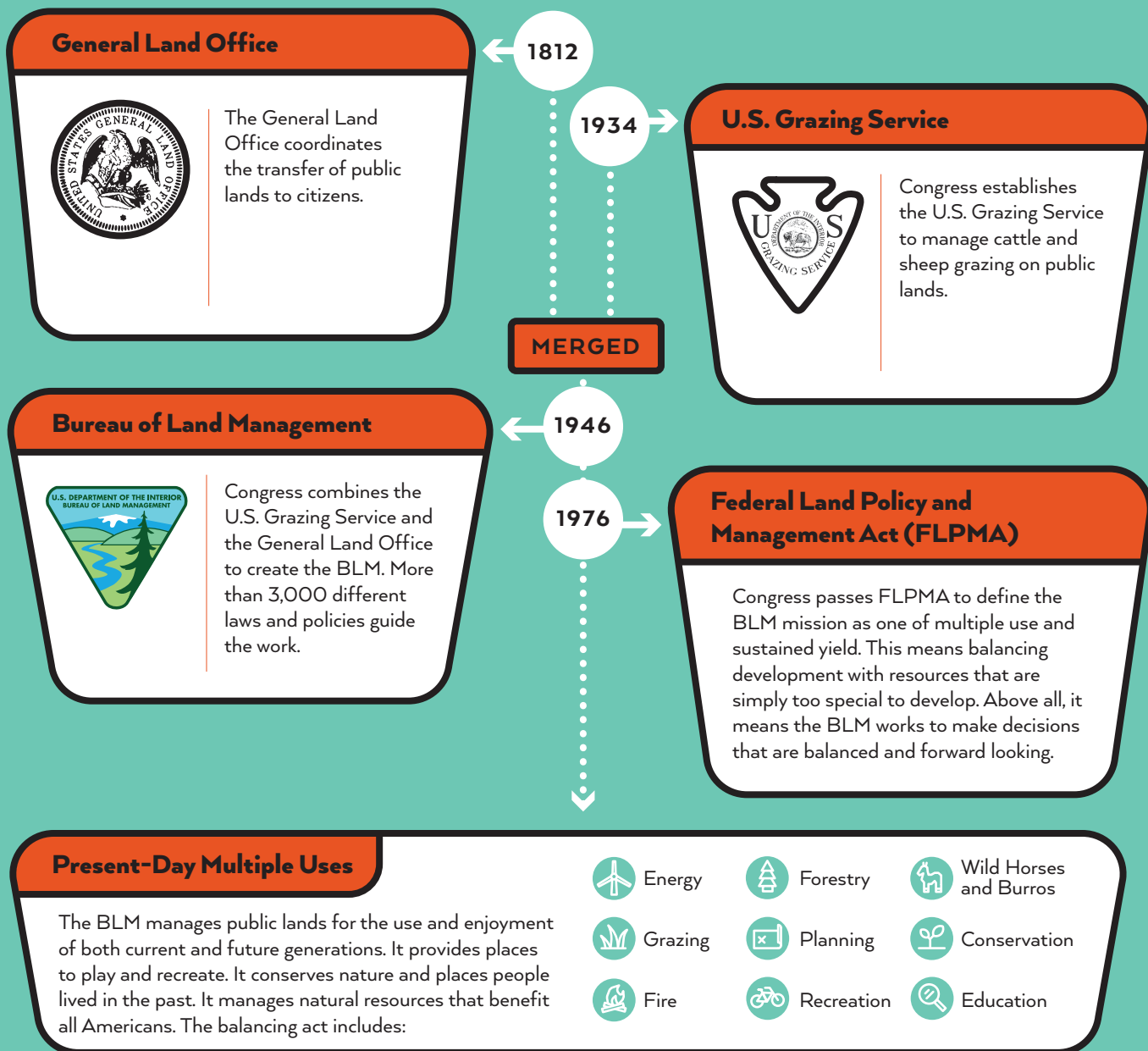
The Junior Ranger program introduces young adventurers like you to the lands and resources managed by the BLM. We invite you to join the adventure!



# My Public Lands: The Roots of Multiple Use

During the 1800s, the United States grew westward, acquiring large amounts of land. The government offered much of this public land to settlers, businesses, towns, and the military. Some lands were set aside for national parks and forests, wildlife preserves, and Indian reservations. Over time, more than 1 billion acres of public lands were sold or given away. Today, the Bureau of Land Management (BLM) manages millions of acres of public land to benefit all Americans, now and in the future.

1



# DECODE THE FREEZEMARK

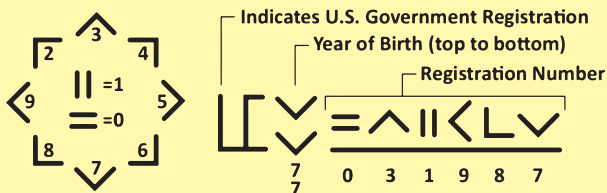
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European explorers and settlers often traveled with horses and burros. Some of the animals escaped; others were set free. Now, thousands of their descendants roam wild on public lands in the West. It's against the law to harm them. The BLM works to ensure that the public lands can support healthy herds.

When the animals are gathered, each is given a unique freezemark. The procedure is painless for the animal. The shapes and angles of the freezemark code tell the animal's estimated year of birth and the state in which it was found. This becomes the animal's identification and reveals part of its history.



Use the diagram below to decode the freezemarks on four wild horses that are up for adoption. Then, check the table of registration numbers to discover the state where the animal was gathered. A sample has been done for you.



## Sample decoded:

Registering organization: United States Government  
Year of birth: 7 - 7 = 1977  
Registration number: 0-3-1-9-8-7 = 031987  
State of registration: Oregon

1.

2.

3.

4.

Year of birth	Registration number	State of registration
1.		
2.		
3.		
4.		



STATE	REGISTRATION NUMBER RANGE
Arizona	80001-160000
California	160001-240000
Colorado	240001-320000
Idaho	320001-400000
Montana	400001-480000
Nevada	480001-640000
New Mexico	640001-720000
Oregon	0-80000
Utah	720001-800000
Wyoming	800001-880000
Eastern States	880001-880100



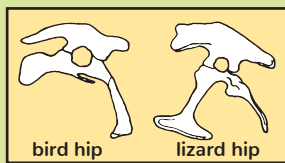
# Boneyard Mystery

Did you know that a shallow ocean once covered a large part of BLM lands in the West? We know this from fossils of sea creatures that have been found there. Fossils are the best clues we have as to how life developed on Earth.

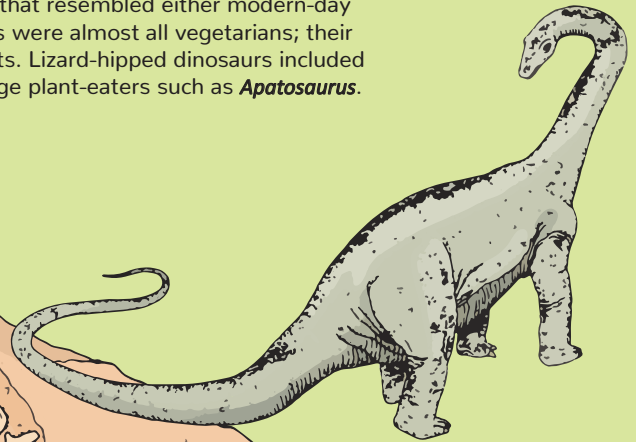
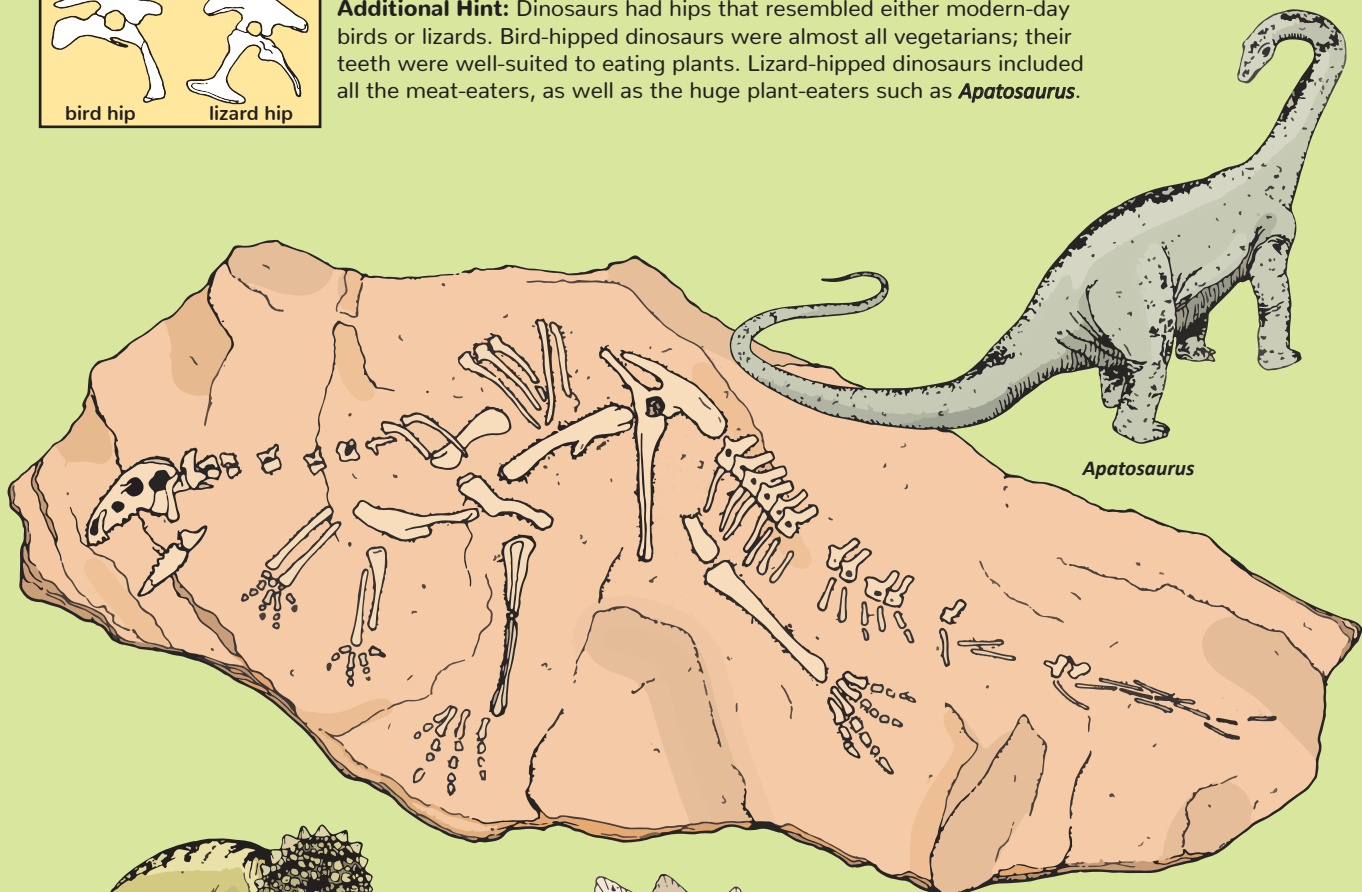
And that's why it's so important to protect these ancient treasures.

3

Scientists called paleontologists study fossils. Now it's up to you to figure out what kind of dinosaur left the fossils shown in the illustration below. Examine the sketches of the bones, and compare them to the drawings of the dinosaurs below. Which dinosaur do you think left these remains?



**Additional Hint:** Dinosaurs had hips that resembled either modern-day birds or lizards. Bird-hipped dinosaurs were almost all vegetarians; their teeth were well-suited to eating plants. Lizard-hipped dinosaurs included all the meat-eaters, as well as the huge plant-eaters such as *Apatosaurus*.



*Apatosaurus*



*Pentaceratops*



*Stegosaurus*



*Hypsilophodon*

# Spot the Sagebrush Critter

The BLM manages wildlife habitat on public lands, including habitat for threatened and endangered species. Biodiversity is very important to maintaining healthy habitats because every critter has a role to play in the ecosystem. Help BLM wildlife biologists study this sagebrush ecosystem by counting the number of critters.

4



\_\_\_ Pronghorn



\_\_\_ Sagebrush lizard



\_\_\_ Hera moth



\_\_\_ Golden eagle



\_\_\_ Great Basin spadefoot



\_\_\_ Darkling beetle



\_\_\_ Green-tailed towhee



\_\_\_ Pygmy rabbit



# Junior Ranger Art

## Be a Poet

Write a **5-7-5 haiku poem!** 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.

### EXAMPLE:

Gray mountain shadows (5 syllables)  
Darken the landscape, spreading (7 syllables)  
A hush as night falls (5 syllables)

*Use this space to write your own poem.*

5



California Coastal National Monument, Jo, 11



White Mountains National Recreation Area, Lars

## 8 Tips for Epic Outdoor Photos

1. Keep the sun behind your shoulder so the light hits your subject.
2. Ask people to remove hats and sunglasses so you can see their eyes.
3. Photograph in soft light, near sunrise or sunset.
4. Keep a single focus on a subject. Don't clutter your picture with too many things.
5. Try photos on cloudy days for nice soft light.
6. Change positions! Squat or lie down for lower objects.
7. For cool action shots, have your friends run or jump while coming towards you.
8. Never take a selfie with wildlife.





*West Eugene Wetlands, Eugene, Oregon*

▲ On the western edge of Eugene, you can view wildlife and restored wetlands, walk on trails, or ride the Fern Ridge Bicycle Path.

*Red Rock Canyon National Conservation Area, Las Vegas, Nevada*

▲ The geology, plants, and animals found here are classic features of the Mojave Desert.

*Garden Park Fossil Area, Cañon City, Colorado*

◀ Fossil viewing, scenic drives, hiking, and picnicking are all available at this one-of-a-kind site.

*Pony Express National Historic Trail, Utah*

◀ Utah's western desert is virtually unchanged from the days of the Pony Express riders, and you can explore this historic route on 126 miles of maintained gravel road.

◀ With more than 190 miles of trail, linking neighborhoods to public lands and people with the natural environment, there are routes for every interest.

*Ridge to Rivers Trails, Boise, Idaho*

◀ Follow in the footsteps of Lewis and Clark's Corps of Discovery, Nez Perce Indians, miners, and fortune seekers.

*Missouri Breaks Interpretive Center, Fort Benton, Montana*

*Killepecker Sand Dunes, Rock Springs, Wyoming*





ation Area,



*Empire Ranch, Tucson, Arizona*

▲ This historic jewel in the high Sonoran Desert of southern Arizona also offers nearby opportunities for picnicking, hiking, photography, mountain biking, and wildlife viewing.

The diverse plants, wildlife, and habitats serve as a wonderful outdoor classroom for visitors and locals. ▶

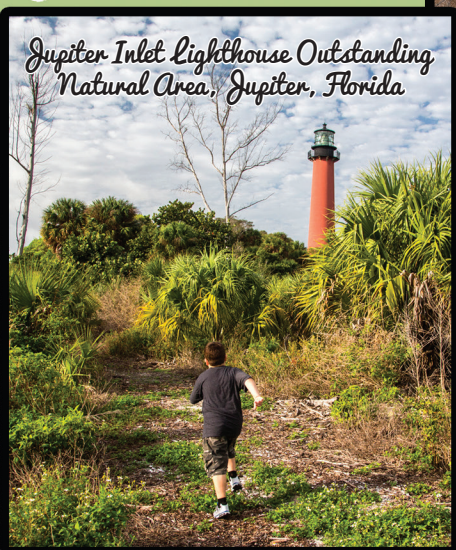


*Campbell Tract, Anchorage, Alaska*

# 12 Places for Your Ultimate Public Lands Adventures

Take a walk through native Florida coastal habitats—all in the shadow of the historic Jupiter Inlet Lighthouse. ▶

*Jupiter Inlet Lighthouse Outstanding Natural Area, Jupiter, Florida*



*Kasha-Katuwe Tent Rocks National Monument, Cochiti, New Mexico*

The “Old Woman Meteorite” is just one of the many out-of-this-world discoveries awaiting you at the Desert Discovery Center. ▶



*Desert Discovery Center, Barstow, California*

◀ Hike and explore the dunes on foot, or bring your off-highway vehicle for an adventure you won't soon forget.



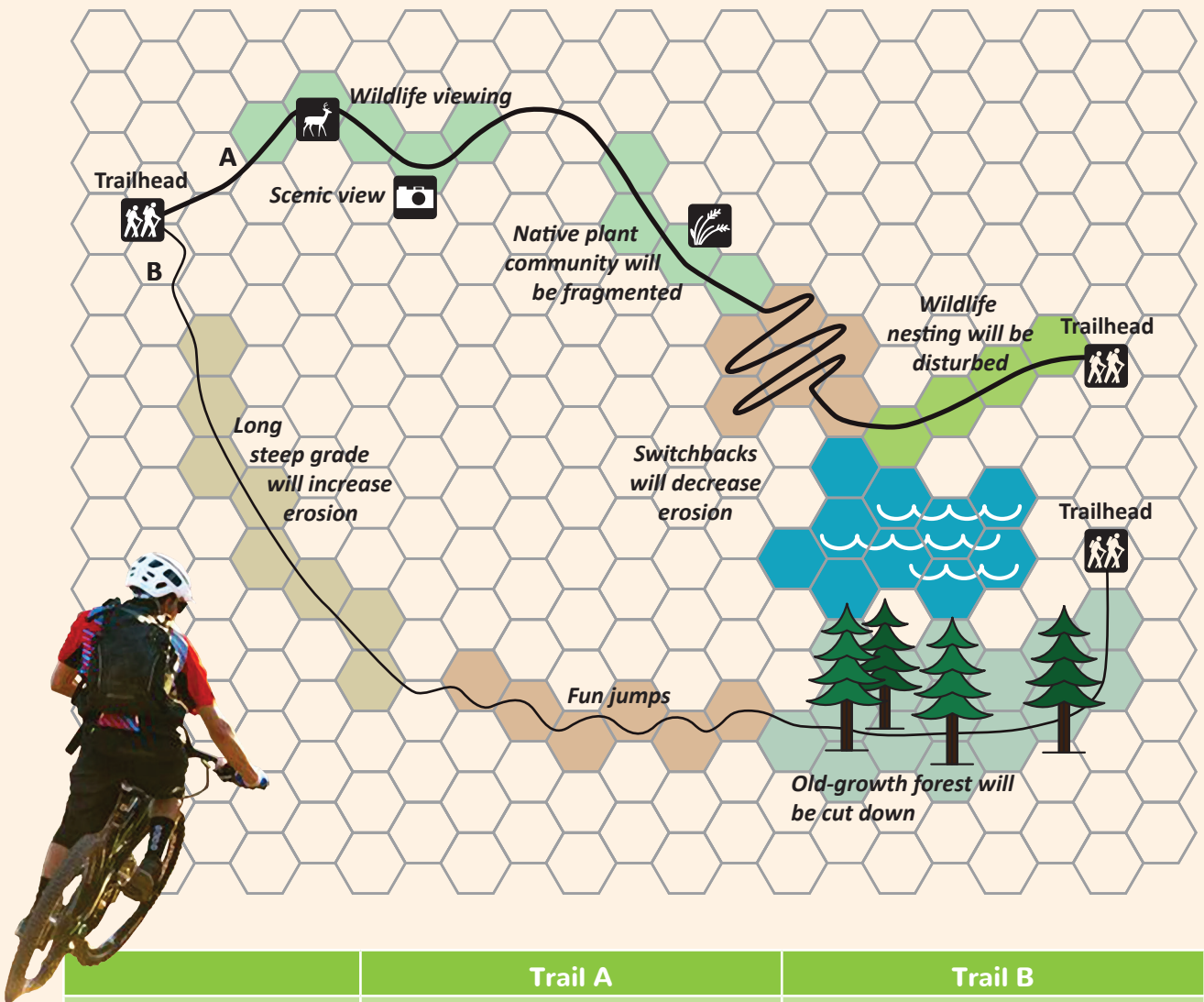
# Help Choose a Trail

BLM outdoor recreation planners work with people in the community to decide how public lands will be

used. They hold public meetings and encourage people to write letters explaining their thoughts. They want to hear from people with many different ideas. They also consider the long-term outcomes of those decisions.

8

The map below shows two possible choices, A and B, for building a mountain bike trail. Using the map, identify the environmental or recreational benefits and impacts of each trail. On the map, one hexagon represents one unit. Use the table provided to count the number of units that might be harmed, or impacted, by the trail. Also, count the number of benefits that will result from the trail.



	Trail A	Trail B
Trail Benefits		
Trail Impacts		

Which trail do you think would be the best choice? Why?





## Trail Mix 'n' Match

Be prepared for your next adventure on public lands by making your own trail mix. Pick your favorites from each group...then mix it up!

**Nuts:** peanuts, walnuts, cashews, almonds, hazelnuts, pine nuts, pecans, macadamia nuts

**Seeds:** sunflower, sesame, pumpkin, hemp, flax

**Dried fruit:** raisins, apricots, pineapple, cranberries, blueberries, dates, figs

**Crunchy bits:** sesame sticks, granola, popcorn, crackers, puffed rice, cereal, pretzel pieces

**Candy:** chocolate chips, peanut butter chips, white chocolate chips

**Extras:** coconut flakes, banana chips

# Sierra & Rio

Did you know that football and our public lands have a lot in common?



There are giant stadiums we can play in.



We even have amazing, living goal posts.



You can get a rush of cold water over your head like the coach of the winning team!



And we can experience bright lights overhead in the middle of wilderness.



However, on public lands, we all get to play!

America's  
Wild Wonders—  
Your Public Lands

[blm.gov](http://blm.gov)



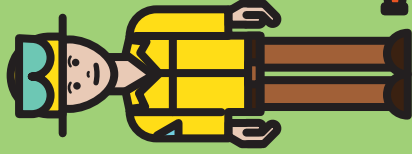


# Explore the Land — Discover Your Career

The BLM employs people with diverse skills, training, and backgrounds to fulfill its multiple-use mission. Learn about a few careers now!

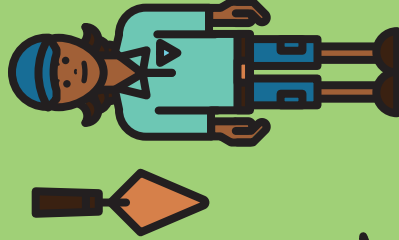
## Wildland Firefighters

Work to prevent, control, and put out wildland fires. One way they do this is by reducing dry shrubs, dead branches, and other fuels before they can burn. Firefighters keep people and communities safe and protect resources.



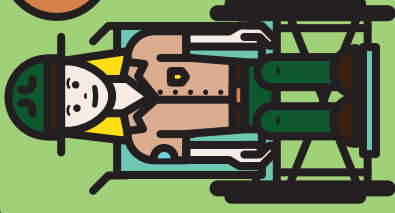
## Archaeologists

Look for evidence of how people lived in the past. They determine how projects on public land affect sites and artifacts. Their work helps preserve places and objects important to our history and culture.



## Park Rangers

Perform a wide range of jobs. Some make sure people are safe while visiting public land. Others help build and maintain trails. Many park rangers are involved in educating people about public lands, why the lands are important, and how to enjoy them responsibly.





# SPOTLIGHT: BLM PARK RANGER AVERY LOVE

Just beyond Avery Love's backyard in northwestern California was the BLM-managed King Range National Conservation Area. By the time Avery was 4, he was riding a bike. It wasn't long before he was biking every trail he could find.

It's no surprise Avery quickly became interested in new mountain bike trails the BLM was building. As a middle school student, his class volunteered every other Friday building trails alongside BLM staff. This experience sparked his interest in working for the BLM.

In high school and college, Avery worked alongside BLM recreation staff as an intern with a program called Nick's Interns. He started as a crew member and advanced to the crew leader. While Avery was taking college classes, he wasn't sure what to do with his life. Talks with BLM mentors helped him discover recreation and environmental management classes.

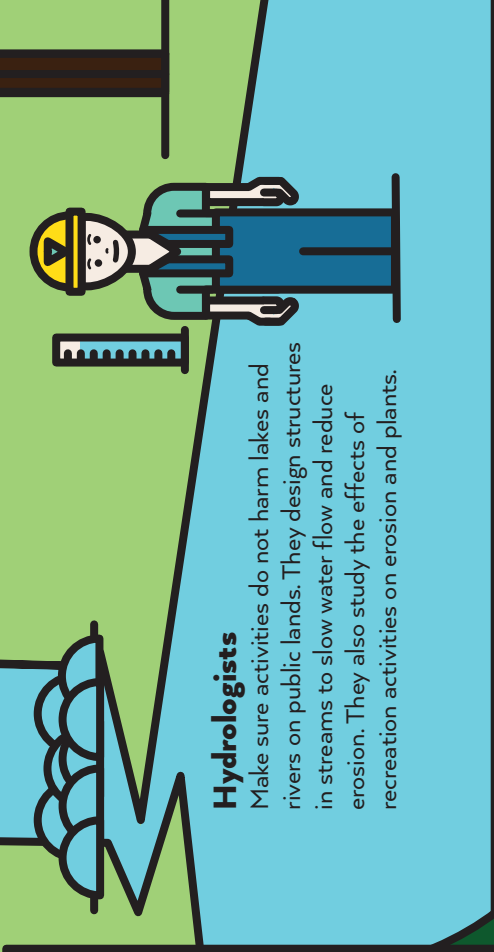
Today, Avery is part of the BLM Pathways internship program. He works as a park ranger for the BLM Arcata Field Office. He sees himself as a problem solver, working to build trails, maintain recreation sites, and keep the area clean for visitors. When he graduates, he will continue his career as a park ranger.



**Avery (far right) learning how to build a mountain bike trail in 2006.**



**Avery putting the finishing touches on a trail sign in 2016.**



## Hydrologists

Make sure activities do not harm lakes and rivers on public lands. They design structures in streams to slow water flow and reduce erosion. They also study the effects of recreation activities on erosion and plants.

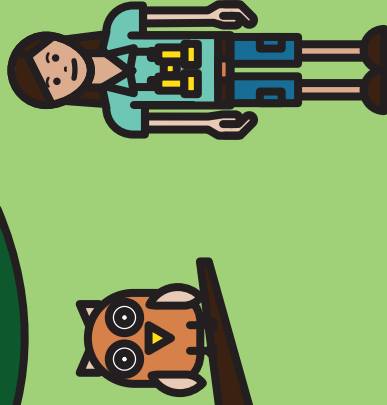


## Rangeland Management Specialists

Make sure that native plants and grasses are protected and conserved. They manage rangelands for livestock and wildlife food and to protect soil and watersheds.

## Wildlife Biologists

Research, manage, and monitor wildlife species and their habitats. They determine the impact of development projects on wildlife and work with other scientists to improve and protect wildlife habitats.



# Answer Key

12

## Decode the Freezemark

Year of birth	Registration number	State of registration
1. 1983	470692	Montana
2. 2005	183245	California
3. 1997	762153	Utah
4. 2010	354876	Idaho

## Boneyard Mystery

*Hypsilophodon*

## Spot the Sagebrush Critter

- |                       |                         |
|-----------------------|-------------------------|
| 2 Pronghorn           | 3 Great Basin spadefoot |
| 1 Golden eagle        | 2 Pygmy rabbit          |
| 2 Green-tailed towhee | 6 Hera buckmoth         |
| 2 Sagebrush lizard    | 5 Darkling beetle       |

## Help Choose a Trail

Answers will vary. An example might be: Trail A, because it offers chances to view wildlife.

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Additional copies may be obtained by contacting:  
BLM Division of Education, Interpretation, and Partnerships  
1849 C Street, NW, LM 2134  
Washington, DC 20240  
(202) 912-7457

CUT OUT  
CERTIFICATE





# BLM Junior Ranger Certificate

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 our important heritage.
- Share what I have learned with others.

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Junior Ranger signature

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Date



# Leave No Trace:

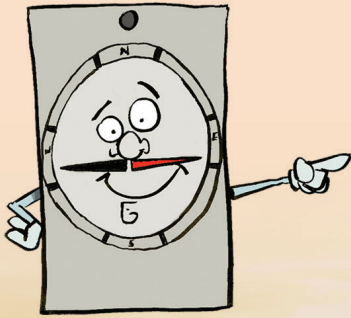


## 7 Principles of Outdoor Ethics

Discover the 7 Leave No Trace Principles.

They'll help prepare you for your next adventure on public lands.

Visit <https://lnt.org/teach/peak/peakonline> to play Leave No Trace games.



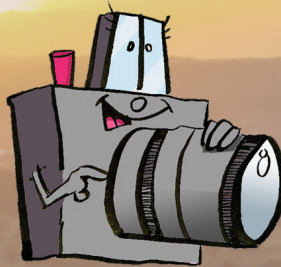
**Know Before You Go**



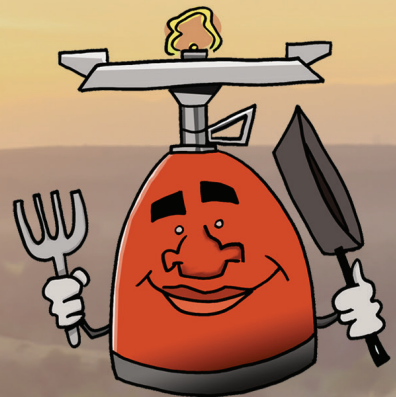
**Choose The Right Path**



**Trash Your Trash**



**Leave What You Find**



**Be Careful With Fire**



**Respect Wildlife**



**Be Kind To Other Visitors**

