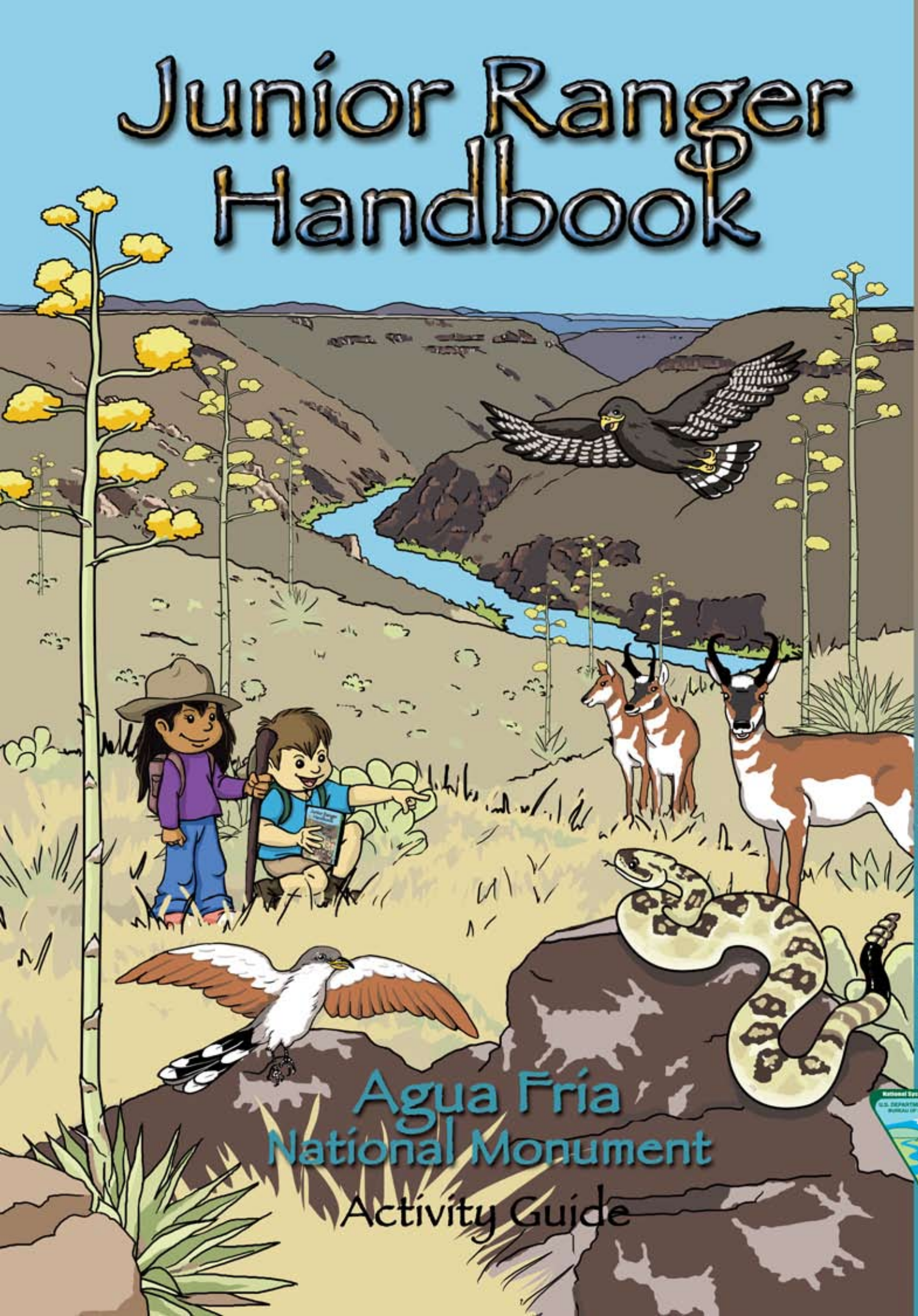
Junior Ranger Handbook



BLM

ARIZONA • PHOENIX DISTRICT

Agua Fría National Monument

Activity Guide

Become a Junior Ranger!

What is a Junior Ranger?

A Junior Ranger explores the environment around them.
A Junior Ranger cares for plants, animals, and the land.
A Junior Ranger encourages others to care for the land and its inhabitants.

How to earn your badge

Complete six or more of the activities in this book at the Agua Fria National Monument, home, or local park.
To receive your Junior Ranger badge and signed certificate ...

... bring or mail your completed booklet (or a copy) to:

Black Canyon Heritage Park
33955 S. Old Black Canyon Hwy
Black Canyon City, AZ 85324

OR

BLM Phoenix District
21605 North 7th Avenue
Phoenix, AZ 85027

Agua Fria National Monument

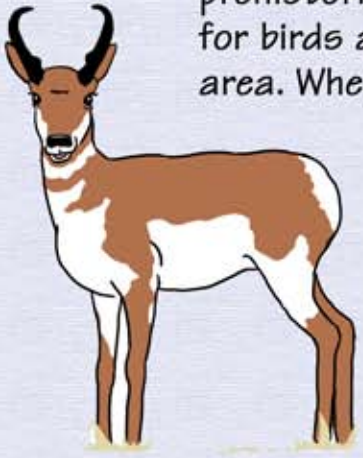
Our President designated this special place in 2000 to conserve and protect its natural (plants, animals, and water) and cultural (archaeology and history) resources for future generations. Agua Fria, translated from Spanish "cold water," is the name of the National Monument and the River that runs through it.

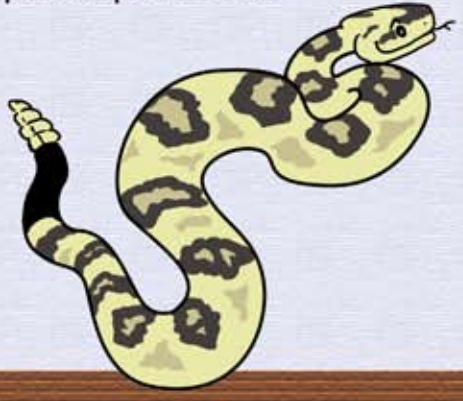
The Agua Fria National Monument is 70,900 acres (111 square miles) in size, which is about four times the size of Manhattan Island in New York. At first glance, the desert landscape of the monument seems an endless display of sunbaked mesas. The silence is broken only by wings of a hawk as it rides the air currents scanning the desert below for its next meal. If you look closely, an intimate, living and vibrant landscape appears. Canyons, towering mesas, rolling plains, and lush river and stream habitats reveal themselves as one passes through this land.

The monument's water sources include rivers, streams, creeks and pools, which provide habitat for fish, amphibians, reptiles, birds, and larger wildlife species such as pronghorn, coyote, javelina, and deer.

The careful observer can see pueblos and "petroglyph" rock art throughout the monument, silent reminders of the native people who once lived in this unique landscape and of modern American Indian Tribes that regard these sites as a vital part of their lives today.

We invite you to get outdoors and explore the Agua Fria National Monument. Pack water and food and enjoy a hike. Look for interesting plants and wildlife. Look for archaeological remains—if you're lucky you may discover a precious prehistoric petroglyph or rock wall remains of a pueblo. Listen for birds and buzzing insects. Learn about the history of the area. When you learn about the Agua Fria, you will want to conserve and protect this special place too.





A World of Animals

The Agua Fria National Monument is home to several species adapted to their environment. Draw a line from the animal to the phrase that matches it.

When in flight, this animal looks like a vulture.

Western Yellow-Billed Cuckoo

This animal uses its long tail for balance.

Specialized scales at the end of its tail warn others of its venomous bite.

Javelina

Inhabits deep pools of water.

Pronghorn Antelope

Uses a disk like nose to dig up roots.

Blacktail Rattlesnake

Mountain Lion

Gila Chub

Built for speed, this animal prefers grasslands where it can easily outrun its predators

Zone-tailed Hawk

This venomous animal spends most of its life underground where it survives off fat stored in its tail.

Gila Monster

Often calls before storms and is nicknamed 'storm crow"

Monument Bingo

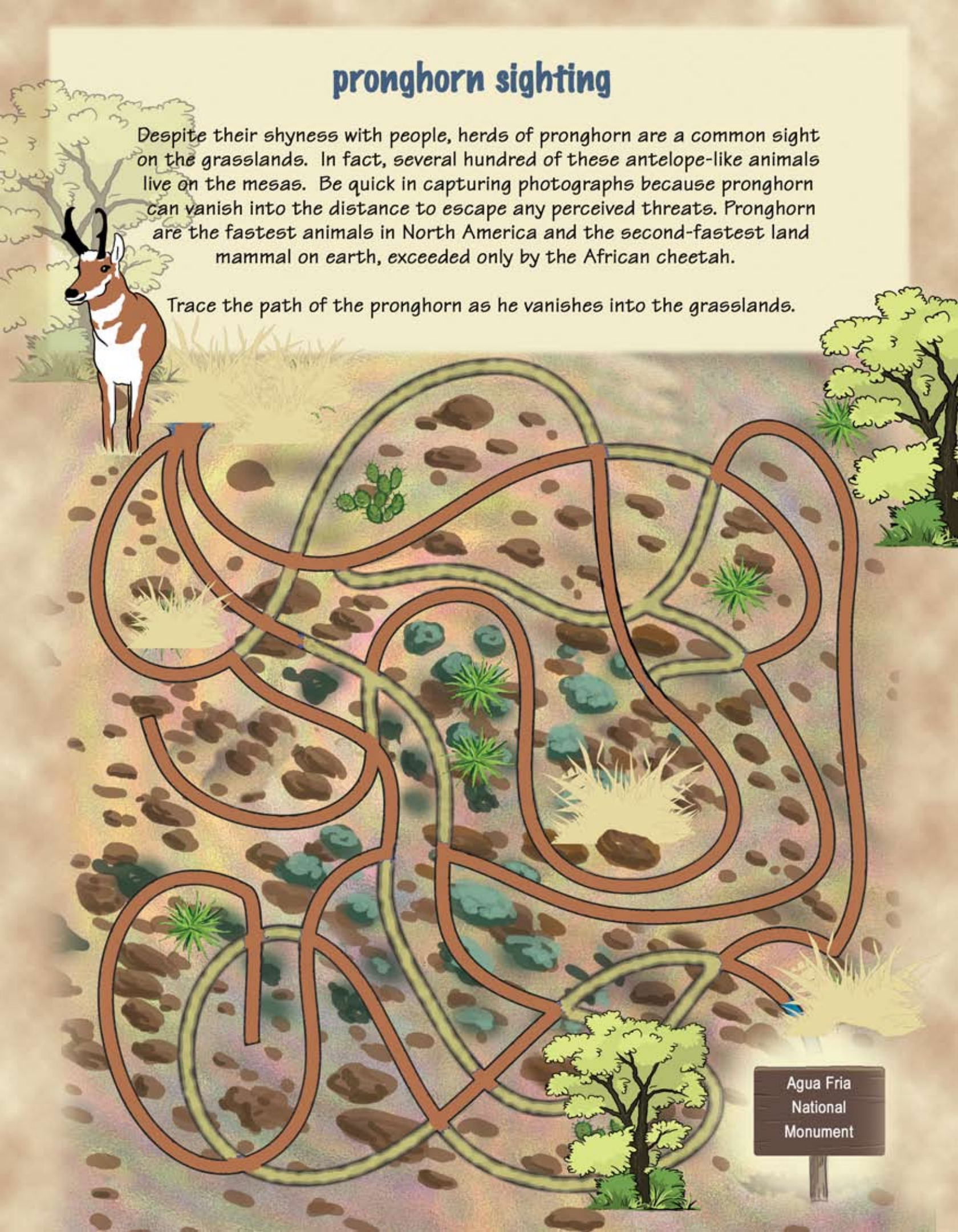
When you are driving or hiking in the Agua Fria National Monument there are lots of things you may see including archaeological remains of the ancient people who once lived here and the plants and animals that lived here with them. You may see other people enjoying the monument, or the Park Ranger. See if you can find four in a row and win a game of Agua Fria National Monument Bingo!

Agave	Hawk	BLM Information Sign	Petroglyph or Rock Art
Cactus	Lizard	Road Number Sign	Agua Fria River
Antelope	Vulture	Home State License Plate	Park Ranger
Prehistoric Ruin	Barbed Wire Fence	Quail	Roadrunner

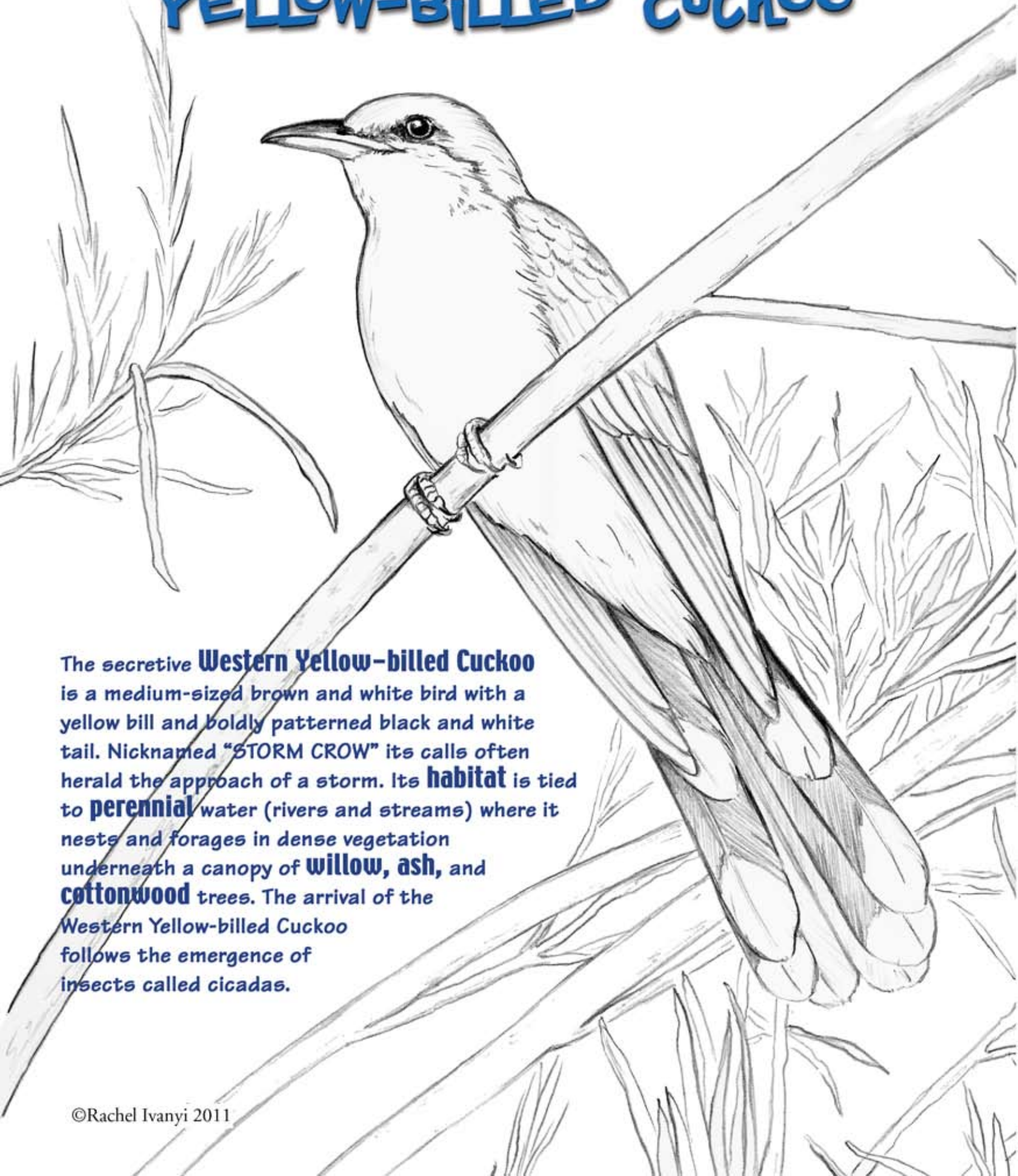
pronghorn sighting

Despite their shyness with people, herds of pronghorn are a common sight on the grasslands. In fact, several hundred of these antelope-like animals live on the mesas. Be quick in capturing photographs because pronghorn can vanish into the distance to escape any perceived threats. Pronghorn are the fastest animals in North America and the second-fastest land mammal on earth, exceeded only by the African cheetah.

Trace the path of the pronghorn as he vanishes into the grasslands.



Western Yellow-billed Cuckoo



The secretive **Western Yellow-billed Cuckoo** is a medium-sized brown and white bird with a yellow bill and boldly patterned black and white tail. Nicknamed "STORM CROW" its calls often herald the approach of a storm. Its **habitat** is tied to **perennial** water (rivers and streams) where it nests and forages in dense vegetation underneath a canopy of **willow, ash,** and **cottonwood** trees. The arrival of the Western Yellow-billed Cuckoo follows the emergence of insects called cicadas.

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ANIMAL TRACKS

It is easy to find animal tracks in the Agua Fria National Monument, in your yard, or in the city park. Find some tracks and try to figure out what kind of animal it was and what it was doing.

Tracking Tips

1. Walk slowly and quietly - if you are lucky you may see the animal.
2. Tracks are easier to see in the mud.
3. Many animals come out only at night so look for tracks early in the morning.

Unscramble the names of the animals that make these tracks.

zadril

hongorpnr

onuaimnt noli

luaiq

lejavani

From One Plant - Many Uses

Agave

Meet the Agave plant which provided many useful products to ancient people. Agave is a succulent, not a cactus as many believe, and is more closely related to lilies. The agave is slow to mature and is generally in the shape of a rosette of thick, fleshy leaves which are often toothed or that end in large spikes. Agaves flower only once, by putting up a tall stalk, which blossoms fragrant flowers, before it dies off, leaving smaller agave plants growing along the many runners and offshoots.

The agave plant was both a source of food and resources for the native peoples. When roasted, all parts of the plant are edible. The leaves were boiled and beaten to produce very strong fibers, called sisal. These fibers could be spun into thread and woven into cloth that could be used to make carpets, rope, blankets, clothing, and sandals. The sharp tip of the leaves could even be used as a sewing needle.

Unscramble the words:

veaga = _____

pero = _____

wegins deleen = _____

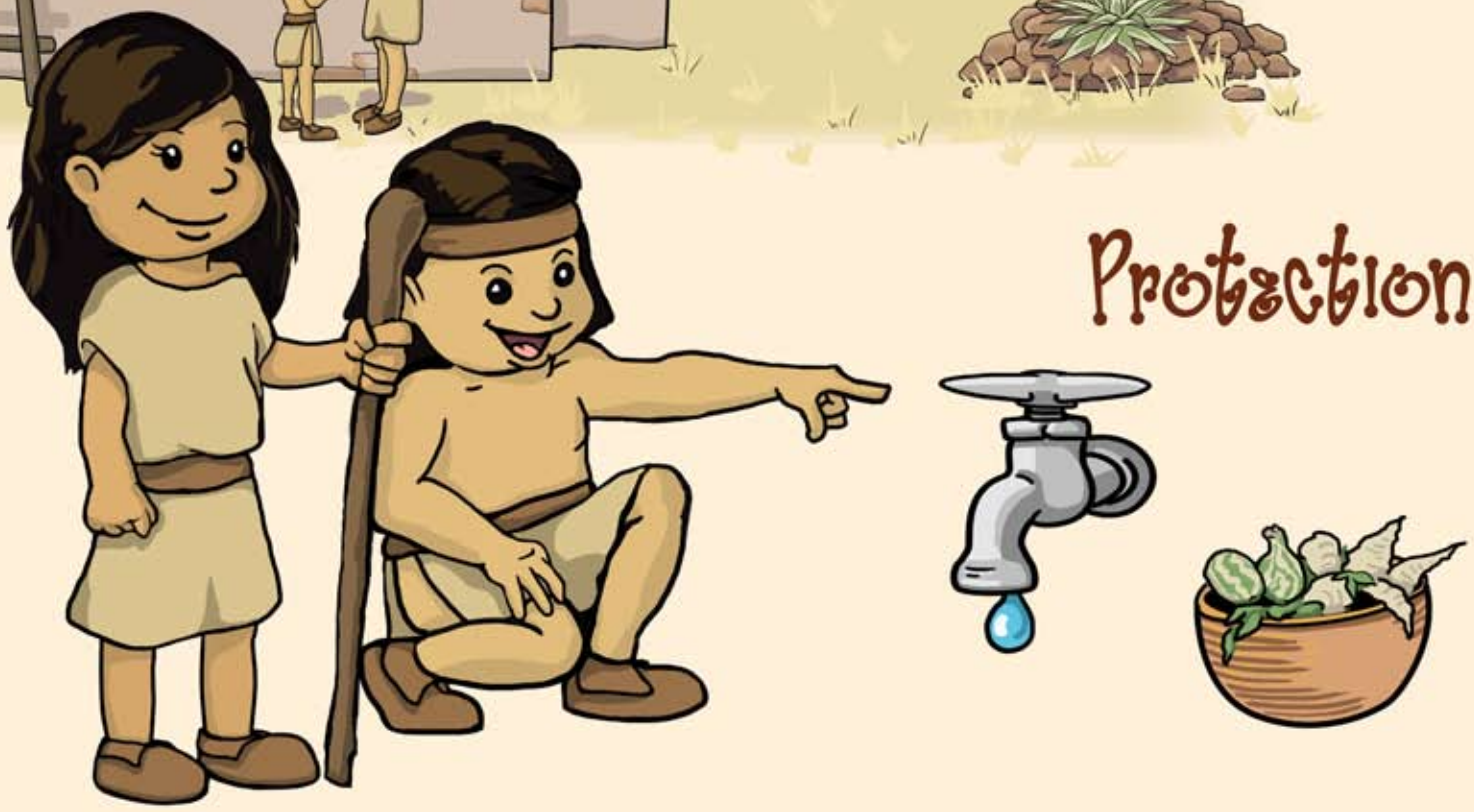
holtc = _____

Perry Mesa

Around the year 1100 A.D. many of the people that lived in Central Arizona moved their families into the higher lands of Perry Mesa and Black Mesa. The community that existed in these areas from 1250 to 1450 A.D. is what archaeologists call the Perry Mesa Tradition.

These prehistoric people built hundreds of multi-room pueblos. At one point it is estimated that over 3,000 people lived in the area. Each village had stone pueblos that could have more than one hundred rooms. That's more than some apartment complexes today!

Protection



Tradition

The Perry Mesa people farmed using terraces. They grew a number of familiar ancient southwestern staples, such as maize, beans and squash, and made rock piles to grow agave. They would also hunt animals in the area such as big horn sheep, deer, and smaller game like rabbits and birds.

Besides the hundreds of villages, the people also left hundreds of rock art sites illustrating their lives. The Perry Mesa people also traded with other groups in the southwest for pottery and other goods.

By 1500 the people of Perry Mesa were no longer living in the area. What they left behind, can tell us much about the lives of these fascinating people.

DRAW A LINE CONNECTING A PERSON'S NEED TO HOW IT IS SOLVED TODAY AND HOW IT WAS SOLVED IN ANCIENT TIMES.

Water Shelter Food

Wildlife
of the Agua Fria National Monument

Find the name of the Agua Fria National Monument animals pictured on these two pages in the word search below. The twelve words can be found horizontally, vertically, diagonally or backwards.

g	o	r	f	d	r	a	p	o	e	l	a	f	h	d	s	u	o	j	g	o	n	v	v	g	t	r	o	l	n
i	y	b	n	m	y	e	l	l	o	w	b	i	l	l	e	d	c	u	c	k	o	o	g	d	t	l	c	u	s
l	q	f	b	u	y	z	m	b	z	j	d	f	s	y	t	g	i	l	a	m	o	n	s	t	e	r	r	y	s
a	v	b	m	e	r	w	q	d	h	r	l	j	a	s	d	f	j	k	l	b	v	x	l	f	w	e	p	o	u
c	n	v	f	q	f	s	u	j	k	l	a	r	e	n	m	c	h	j	f	d	s	a	o	g	k	p	u	i	i
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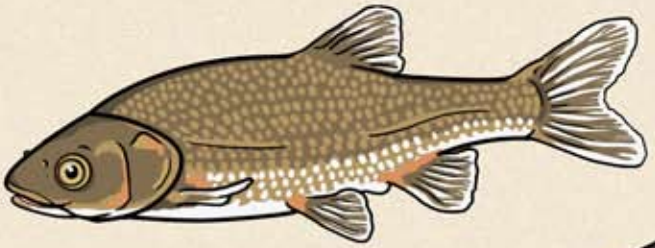
q	y	j	k	l	d	o	l	n	g	d	h	j	v	t	f	b	j	l	o	e	g	f	e	v	f	h	k	k	l
y	a	n	t	e	l	o	p	e	n	m	f	r	a	f	x	o	p	j	t	r	f	e	o	n	m	c	f	d	t
r	h	i	l	i	n	m	u	g	s	g	t	y	j	t	h	j	k	n	o	i	l	n	i	a	t	n	u	o	m

javelina



gila chub

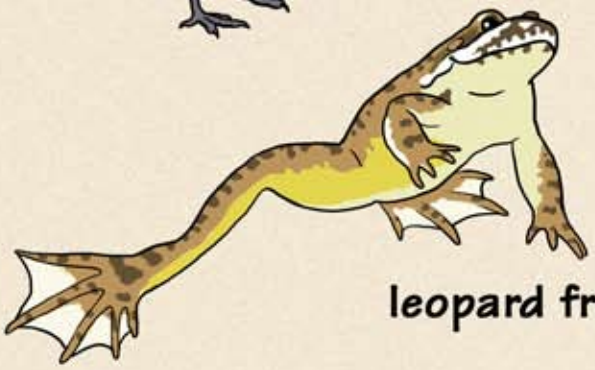
gila monster

antelope

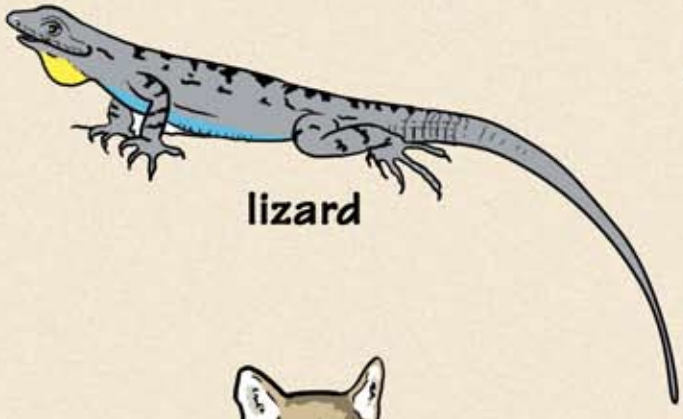
mule deer

yellow-billed cuckoo

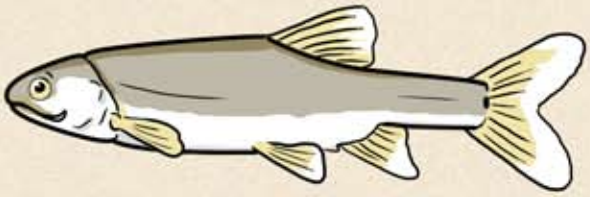
quail



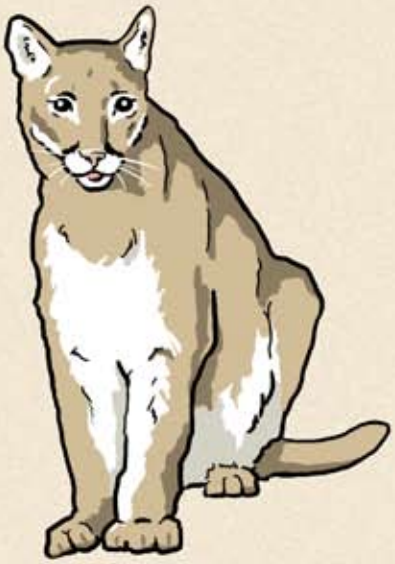
leopard frog



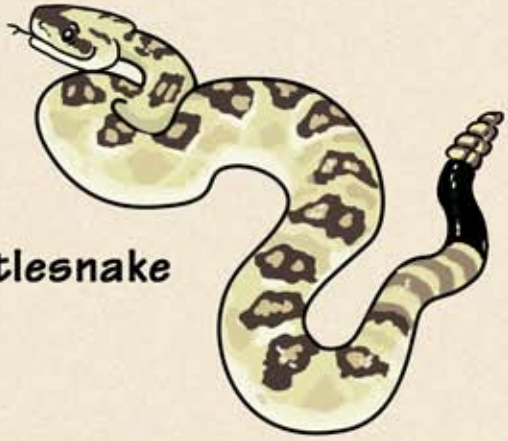
lizard



longfin dace



mountain lion



rattlesnake

How to Visit an Archaeological Site

The archaeological remains that are found within the monument can never be replaced. Once they are taken or damaged they are gone forever. Enjoy looking at these treasures but be respectful and leave everything as you find it for others to enjoy. Remember these simple rules for visiting archaeological sites:

1. Pick up and look at artifacts on the ground but return them to where you found them.
2. Do not touch rock art. Photograph or sketch the images.
3. Do not walk on walls. The walls can fall causing permanent damage to the site, or to you!
4. Do not post the locations of the sites on the internet. This can lead to damage, theft or vandalism.
5. Read and follow instructions on informational signs.
6. Do not move or stack artifacts, leave them where you find them.

Take only _____, leave _____ where you find them for others to enjoy..

ARTIFACTS

Hello Archaeologist!

One of the ways that archaeologists learn about how ancient people lived is to study what they left behind. Artifacts are the remains of objects that people made and used in their lives and were either left behind when they moved away or were thrown in the trash, called middens by archaeologists. By studying what the ancient people left behind, archaeologists try to piece together the story of how people may have lived long ago.

What do you think someone from the future could learn about your family from what you throw away or would leave behind? Take a look at what your family throws away in a week and what you might leave behind if you had to move and could not take anything with you except what you must have to survive. Make a list of those things and then pretend you are finding these things in the future and you don't know anything about your family or the times you lived in.

Write a report about your family and how they lived from what you have on your list.

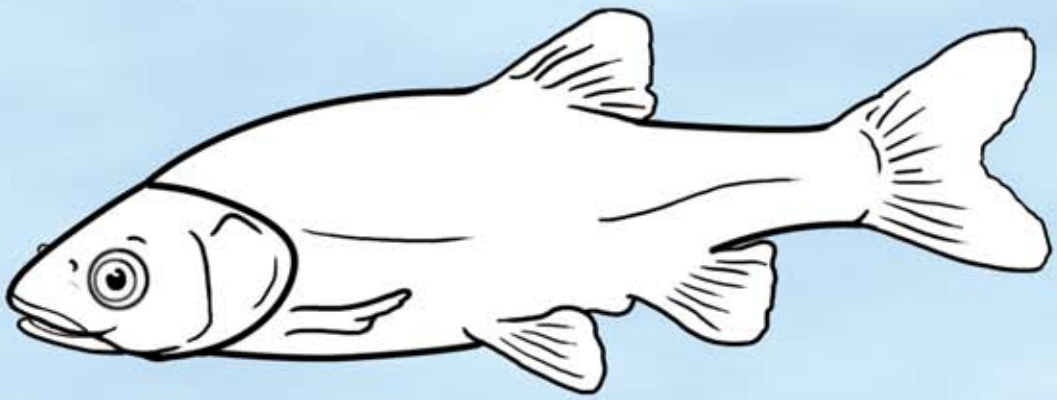
PATHWAY TO THE PAST

The ancient people that lived on Perry Mesa, within what is now the Agua Fria National Monument, left images on the rocks called petroglyphs, or rock art. Petroglyphs were made by pecking on the stone with other stones or stone tools. Archaeologists study petroglyphs to try and understand the meaning, or the reason they were made but no one knows for certain why petroglyphs were made or what they mean.

They may have been pictures from stories or myths. Some present day American Indian people have said they pertain to gods or other characters known from histories, myths, and other oral traditions. Some petroglyphs look like they were related to hunting. Some may have been for marking time, or a special place. Look at these petroglyphs and write in the space next to them what you think the petroglyph may have meant or what message the ancient people were trying to say with it. Remember, no one knows for sure, so use your imagination.
Or, draw a petroglyph you saw at the Monument!

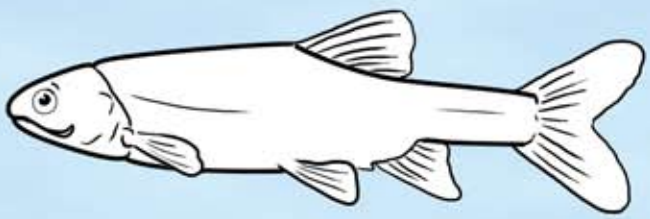
native fish

The Agua Fria River and its tributaries are rare flowing rivers which endangered fish depend on. The riparian (rivers and streams) ecosystems sustained by year-round water support populations of endangered fish species like the Gila chub, Desert pupfish and Gila topminnow as well as other native fish.



Gila chub

Desert pupfish

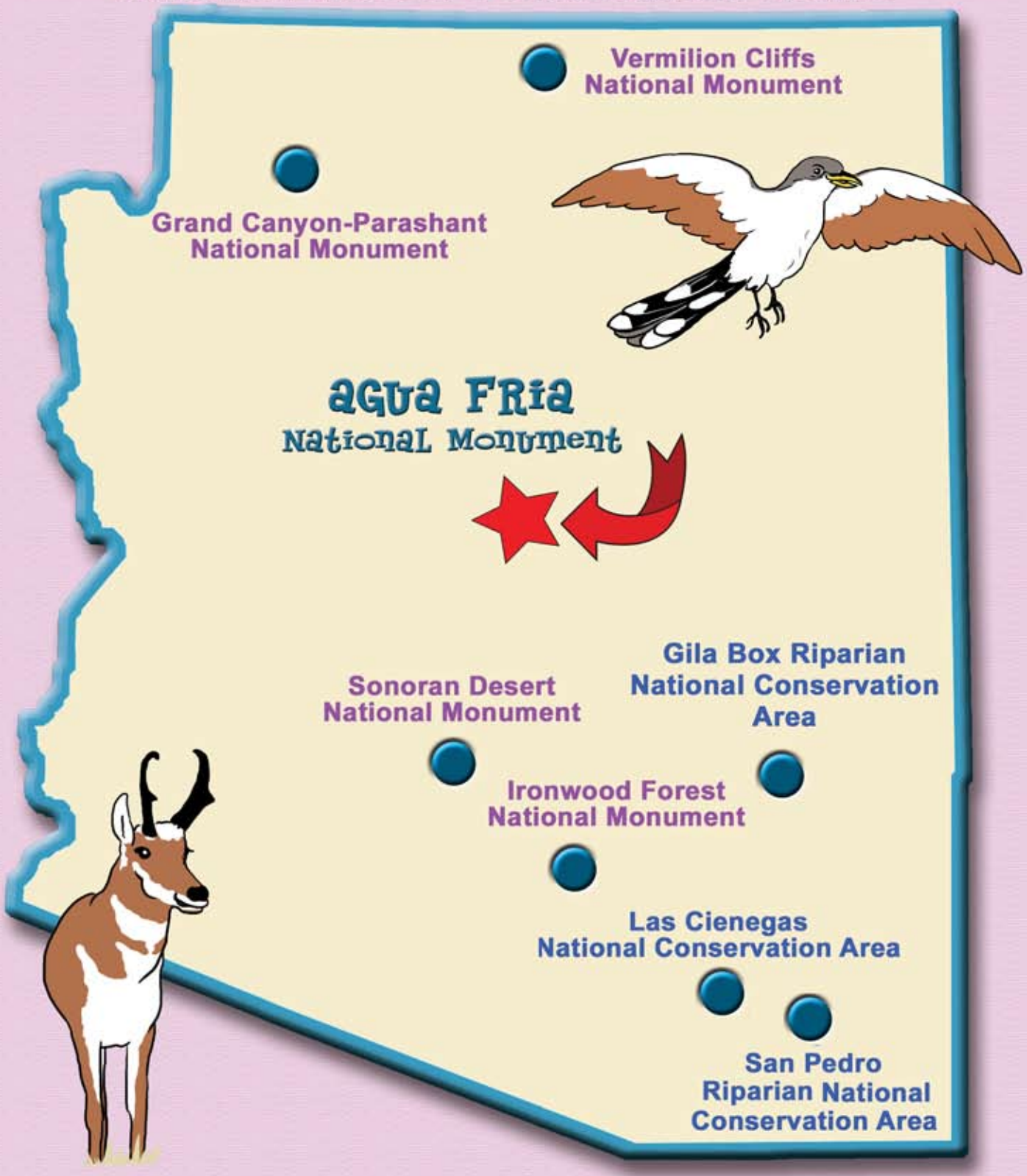


Gila topminnow

More Places to Play and Learn!!!

on the

NATIONAL LANDSCAPE CONSERVATION SYSTEM



Illustrators:

Cover landscape, scenes, articles and animals - Rachel Ivanyi
Coloring pages - Yellow-billed Cuckoo - Rachel Ivanyi
Junior Ranger images: Mark Swan

Junior Ranger Oath

I promise to help protect the Agua Fria National Monument, public lands, my community, and the earth by being an active and responsible steward of the environment.

I promise that I will not feed wild animals.

I promise to leave rocks, plants, artifacts and historic objects as I found them for everyone to enjoy.

I promise to continue to explore, learn about, and respect the world wherever I go.

I promise I will share what I learn with others.

Signed _____

Date _____