



Junior Ranger Activity Book

Alibates Flint Quarries National Monument
Lake Meredith National Recreation Area





Thank you for participating in the Alibates Flint Quarries National Monument and Lake Meredith National Recreation Area Junior Ranger Program!

Junior Rangers are special and important people. No matter your age, Junior Rangers understand how special our National Parks are to everyone in America. Each park is a unique national treasure and teaches us something important about what it means to be an American. Some parks, like Alibates Flint Quarries, teach us about people who lived long ago and historic events of our past. Parks like Lake Meredith help us enjoy the natural world in our own backyard. We can learn about the animals, plants and ecosystems sharing the planet with us. Earn your badge today!

Junior Rangers earn their badges by completing the following activities and sharing their book with a Park Ranger. If you are unable to finish the Junior Ranger program while you are visiting the parks, please mail your completed book to:

Ages 5-7	Ages 8-10	Ages 11 and Over
Complete pages 8-12	Complete pages 6-13	Complete all pages
Watch Sharp Edge of Survival	Watch Sharp Edge of Survival	Watch Sharp Edge of Survival
Draw a picture describing your visit in your Naturalist's Notebook	Draw or write about your visit in your Naturalist's Notebook	Write about your visit in your Naturalist's Notebook

Junior Ranger Program
P.O. Box 1460
Fritch, TX 79036



Safety Always Comes First

While working to become an official Junior Ranger, remember safety always comes first. Never do anything to place yourself, or others in danger.

Some of the most important safety rules are:

- Drink plenty of water, even when you do not feel thirsty. The Panhandle winds make this a very dry place, and you can quickly become dehydrated, which means thirsty.
- Watch where you place your hands and feet. Dark places under rocks and bushes are the likely homes for snakes, spiders, and scorpions. Given a chance, most animals will move out of your way.
- Treat all wildlife with respect. Remember, you are visiting their home, and they need their space. **Never** pick up any wildlife.
- Be especially careful around plants. Many have thorns or stickers. Cacti and yucca have sharp spines, or leaves, and might hurt if you brush up against them.
- **Never** hike alone.



7 Principles of Leave No Trace

- 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





Two Very Special Places

Lake Meredith National Recreation Area is in the center of the Texas Panhandle. The lake was formed in the 1960s when the U.S. Bureau of Reclamation constructed Sanford Dam on the Canadian River. The dam was built for two purposes, drinking water and recreation. The reservoir supplies water to eleven communities in the Panhandle by means of 322 miles of pipeline. Lake Meredith National Recreation Area consists of about 45,000 acres, the largest open body of water in the Texas Panhandle.

The lands and waters of Lake Meredith National Recreation Area support a major sport fishery and contain facilities for camping, picnicking, kayaking, paddleboarding, canoeing, boating, biking, and hiking. Lake Meredith is the only public land for hunting deer, quail, ducks, and other birds. Have you visited Lake Meredith lately?

Alibates Flint Quarries is the only National Monument in Texas. The National Monument was created in 1965 to preserve the extensive flint quarries, once used as a source of raw materials for weapons and tools by prehistoric people. Alibates Flint Quarries National Monument also protects the ruins of a village site of the Antelope Creek culture, who inhabited the area more than 700 years ago.

Did You Know . . .

The word *Alibates* comes from a cowboy named Allen Bates, nicknamed "Allie".

"Allie" Bates lived on a ranch in the Panhandle in the late 1800s. The monument was named after Alibates Creek and Alibates flint, which were both named after the cowboy.





Don't Be a Litterbug!

People from all over the world visit Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument.

Visitors from Germany, Poland, France, and other foreign countries have visited these parks in the Texas Panhandle. Some visitors come to swim, fish, camp, kayak, or hike, often bringing food and supplies for their trip. Almost everyone throws away some kind of garbage. Fortunately, most people place trash in the garbage can where it belongs. A good Junior Ranger never litters, especially in our National Parks. However, a few careless people leave trash along roads, trails, and in campsites. Did you know some of this trash takes years to decompose or breakdown? How can you help?

The chart below shows how long some trash takes to breakdown.

Banana peel	3 to 4 weeks	Nylon cloth	30 to 40 years
Orange peel	6 months	Plastic container	50 to 80 years
Milk/Juice carton	5 years	Aluminum	90 to 100 years
Cigarette butt	12 years	Plastic 6-pack holder	450 years
Leather shoes	25 to 40 years	Plastic foam	100 years

Did you know . . .

The Texas Horned Lizard or "Horny Toad" is a flat-bodied and fierce-looking lizard. This lizard is brownish with two rows of fringed scales along each side of the body. The Horned Lizard rarely eats anything but ants. Be sure to watch for Horned Lizards along the trail at Alibates Flint Quarries National Monument near an ant bed. The Horned Lizard is listed as a threatened species in Texas.





Discovering Cultures . . .

People have been coming to the quarry pits for more than 13,000 years to gather stone for tools and weapons. Archeologists are the scientists who help us learn about the lives of prehistoric people. They are trained to find and interpret the few remains left on the ground surface called “artifacts”. Sometimes the archeologists conduct digs to find more artifacts buried underneath the ground for a long period of time.

The earliest Panhandle people hunted Ice Age big game like mammoths and giant bison, using a special tool to throw called an “atlatl” (pronounced “at-uhl at-uhl). Later, the bow and arrow replaced the spear as the weapon of choice to hunt smaller game such as modern bison, deer, and antelope.

Use the key to solve the following cryptogram, or puzzle:

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

 13 1 13 13 15 20 8 2 9 19 15 14 19 16 5 1 18 18 1 14 3 8 5 18

From around AD 1150 to 1450, a group of people known as the Antelope Creek culture lived year-round in the Texas Panhandle. They built houses using the native dolomite rock, and dug pits by hand to gather quantities of fresh Alibates flint. They also grew corn, beans, and squash in small gardens near their houses. These three cultivated plants are often called “Three Sisters” by Native Americans.

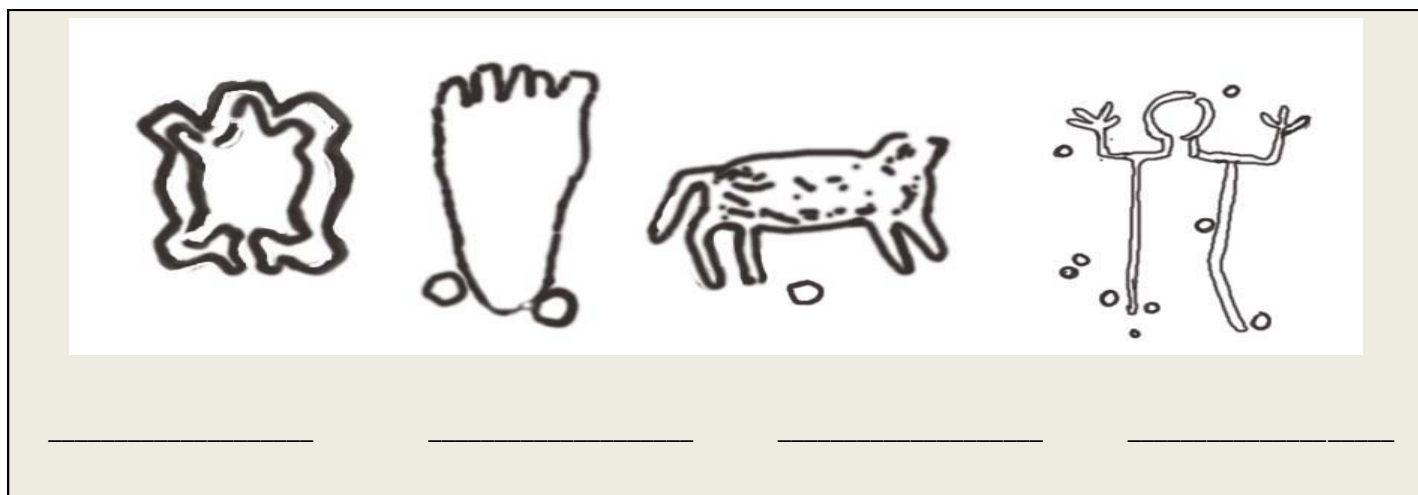
Have you eaten any corn, beans, or squash lately?





... and Symbols of the Past and Present

Prehistoric peoples did not have a written language like we do today. Instead, their history was passed on through stories and symbols. These symbols were painted on pottery, animal hides, and rock (often called a “pictograph”). When these designs were scratched or pecked into the rock, they were called “petroglyphs”. There are petroglyphs in both Lake Meredith National Recreation Area and Alibates Flint Quarries National Monument. You can see the petroglyphs below if you take a tour to the prehistoric ruins. What do you think these symbols might represent?



Today, we also use symbols in our written language. A thousand years from now scientists may have to guess the meaning of our symbols.

Can you draw the correct symbol for each of the words below?

1. question mark.....
2. dollar.....
3. at
4. percent
5. number.....
6. period.....
7. exclamation.....
8. and.....
9. multiply.....
10. equal.....

@	?	=
!	%	# .
&	X	\$



A Rainbow of Color



Where did the brightly colored rock at Alibates Flint Quarries National Monument come from? Legend says, early inhabitants of the Alibates area were waiting for the rains after a long drought. Finally the rains began, and afterwards a beautiful rainbow lingered in the sky for days, weeks, and maybe months.

One day, a family hiked to take a closer look at the rainbow. When they reached out to touch the rainbow, they discovered it was as hard as rock—a petrified rainbow! As word of this magic rainbow spread, more and more people came to see it. Soon, everyone began chipping at the base of the rainbow to take a piece of the rock home with them.

Suddenly, the winds swept across the bluffs, and the rainbow began to sway back and forth. Soon the rainbow tipped over and shattered into millions of pieces, covering the ground in gleaming shards of brightly colored flint. According to the legend, this is how Alibates flint was formed. What do you think?

How many colors of flint did you find during your tour of Alibates Flint Quarries National Monument? Place a check next to each color you saw.

- | | | |
|---------------------------------|--------------------------------|---------------------------------|
| <input type="checkbox"/> Red | <input type="checkbox"/> Gray | <input type="checkbox"/> Purple |
| <input type="checkbox"/> Orange | <input type="checkbox"/> White | <input type="checkbox"/> Maroon |
| <input type="checkbox"/> Yellow | <input type="checkbox"/> Pink | <input type="checkbox"/> Brown |
| <input type="checkbox"/> Blue | <input type="checkbox"/> Black | <input type="checkbox"/> Green |



Wildlife Checklist

If you see it, check the box

Turkey Vulture



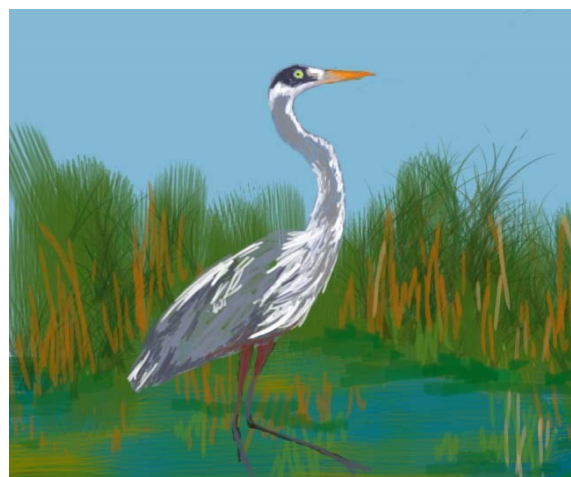
Rattlesnake



White-tailed Deer



Great Blue Heron



Roadrunner



Box Turtle





Wildlife Checklist

If you see it, check the box

Monarch Butterfly



American Beaver



Collard Lizard



Scorpion



Eagle



Dragonfly





Plant Checklist

If you see it, check the box

Mesquite Tree



Prickly Pear



Common Sunflower



Cottonwood Tree



Juniper



Chocolate Flower





Plant Checklist

If you see it, check the box

Sacred Datura



Blackfoot Daisy



Purple Coneflower



Lemon Sumac



Sand Sage



Cholla Cactus





Look up; look down; look all around.

Each of these things can be found somewhere in the park.

When you see one of the items below, mark it.

When you have a whole row, diagonal or horizontal, you have a

BINGO!



Mesquite Tree



Spider Web



Skunk



Deer



Grasshopper



Collard Lizard



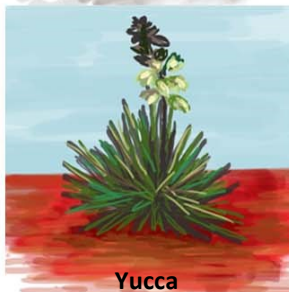
Dolomite Rock



Prairie Dog



Tent



Yucca



Fox



Butterfly



Litter



Quail



Dragonfly



Animal Tracks

Did You Know . . .

Native Americans used yucca plants in many ways. The roots were used as soap; the flowers were eaten like a salad; and the leaves were woven into rope, sandals, baskets, and mats. A common name used in Texas for the yucca plant is “soapweed.”





Word Search

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

ALIBATES
ARTIFACTS
BISON
BONES
CANADIAN

DOLOMITE
DRILL
FLINT
FOOT
HAMMERSTONE

MAMMOTH
PETROGLYPH
QUARRIES
RAINBOW
RUINS

TURTLE
YUCCA
TRAIL
LIZARD
DEER



Did you know . . .

The bison has been around for a long time and has gone through many changes. At one point in history, a prehistoric bison, *Bison latifrons*, had horns measuring nine feet from tip to tip, much larger than today.



Places in the Park

Unscramble each of the clue words.

Copy the letters in the numbered squares to other squares with the same number.

W A M L N L I U

--	--	--	--	--	--	--	--	--	--

10

H F R C T I T R F E S R S O

--	--	--	--	--	--	--

11

--	--	--	--	--	--	--	--	--	--

6

L A R E H D T A I

--	--	--	--	--	--	--	--	--	--

2

S I G R N P N Y N C A O

--	--	--	--	--	--	--

7

--	--	--	--	--	--	--	--

C M B R D E I

--	--	--	--	--	--	--	--

4

L U M P R E K C E

--	--	--	--

1

--	--	--	--	--	--

R O H R A B B Y A

--	--	--	--	--	--	--

12

--	--	--

B U E L E C R K E

--	--	--	--

8

--	--	--	--	--	--

R O D F A S N K E Y A

--	--	--	--	--	--	--	--

3

--	--	--	--

N U P M O G R A D C

--	--	--	--	--	--	--	--	--	--

5

C A D R E C A N N O Y

--	--	--	--	--	--

9

--	--	--	--	--	--	--

--	--	--	--

1 2 3 4

--	--	--	--	--	--	--	--	--	--	--	--

5 6 7 8 9 10 11 12

Did you know . . .

The Roadrunner prefers to run rather than fly. This speedy bird can run up to 15 mph in search of lizards, scorpions, rodents, and snakes.

How fast you can run?





Help the Earth Checklist

We are sure you know that the earth's environment is facing many different threats, including climate change, air and water pollution, water shortages, and loss of critical habitat. But you can help our environment, and here are some simple things you can do. After you check the list, write a few sentences about how you can help.

EVERYWHERE

- ___ Recycle items, especially paper, glass and metal
- ___ Repair items instead of replacing them
- ___ Pick up litter and recycle or dispose of it properly

FOOD

- ___ Buy/consume foods which are grown locally and/or certified organic
- ___ Use a lid when boiling water to reduce energy used

HOME

- ___ Turn off lights and appliances when not in use
- ___ Don't leave the water running when you're not actually using it, e.g., while brushing teeth or rinsing dishes
- ___ Donate old clothes to charity
- ___ Set up a place for recyclable items
- ___ Use native plants which don't require a lot of water
- ___ Don't overwater your lawn and plants

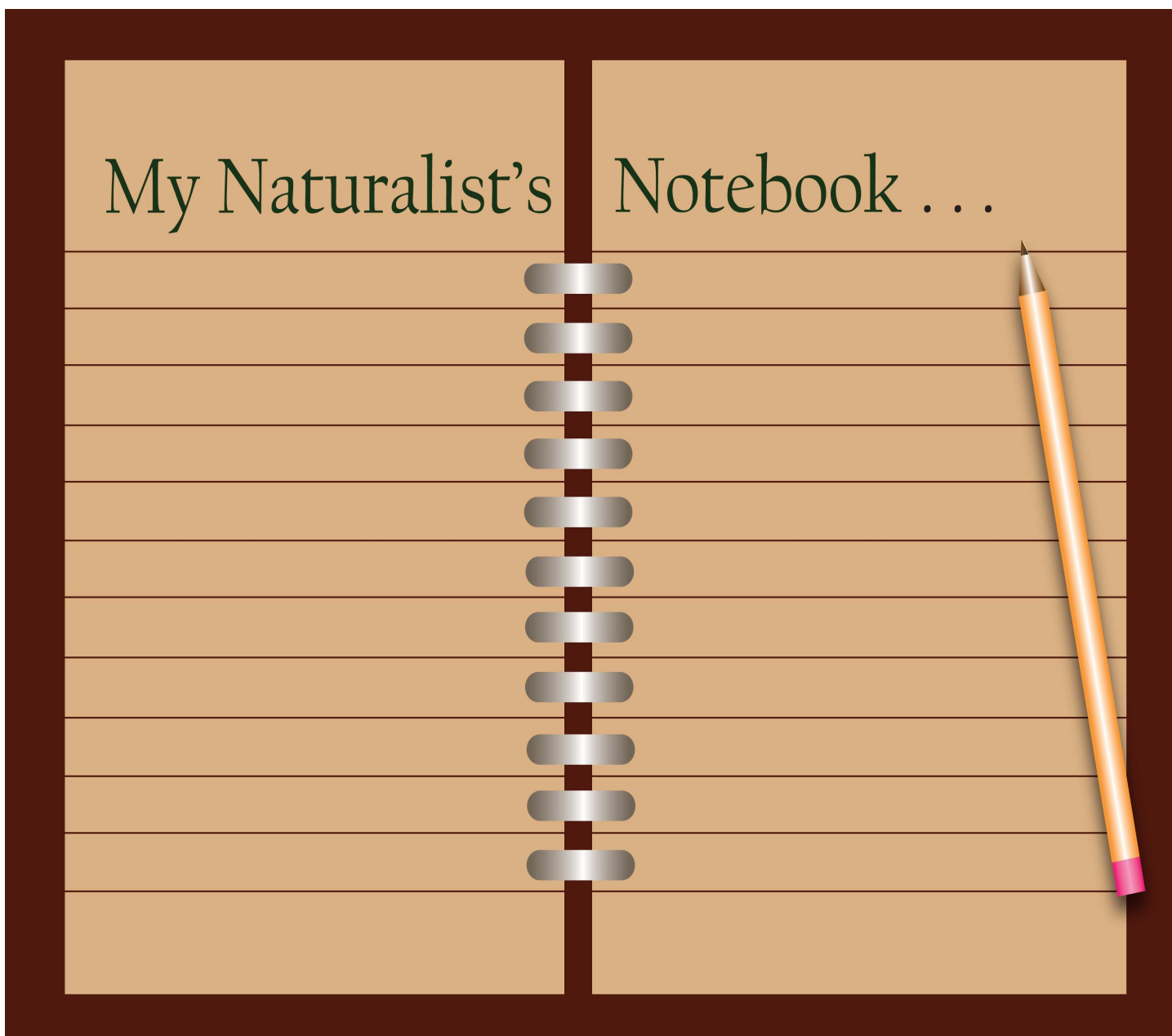
Help the Earth projects I want to try . . .





Naturalist's Notebook

Naturalist Rangers carry a notebook to record things they have seen. Did you know if you write or draw what you see, you won't forget it? On your adventures, you can keep a record of all the animals, plants, and places you see. You might notice a lizard basking in the sun. What types of tracks did animals leave behind? What was the weather like during your visit? You could keep a naturalist's notebook throughout the year to record what you see. Why not begin today by keeping a record of your adventures here in the parks. Record what you have seen and experienced in the notebook below. Have fun!





Junior Ranger Oath

I, _____ promise to help protect the plants, animals, and people of Alibates Flint Quarries National Monument and Lake Meredith National Recreation Area.

As a Junior Ranger, I promise do my part to learn more about National Parks and how to preserve and protect nature's beauty for generations to come.



Ranger _____

Date _____

This certifies that

has completed the Junior Ranger Program at
Alibates Flint Quarries National Monument
and
Lake Meredith National Recreation Area
and is hereby considered an official

Junior Ranger

Awarded on the _____ day of _____, 20____

Ranger _____





Written by the Interpretive Staff of Alibates Flint Quarries
National Monument and Lake Meredith National Recreation Area
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