Teacher’s Handbook

Mount Magazine State Park
# Mount Magazine State Park Teacher’s Handbook

## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission Statement</td>
<td>1</td>
</tr>
<tr>
<td>Mount Magazine State Park</td>
<td>2</td>
</tr>
<tr>
<td>Curriculum Description</td>
<td>3</td>
</tr>
<tr>
<td>Concepts</td>
<td>4-5</td>
</tr>
<tr>
<td>Field Trip Guidelines</td>
<td>6-7</td>
</tr>
<tr>
<td>Student Information</td>
<td>8</td>
</tr>
<tr>
<td>Program Descriptions</td>
<td></td>
</tr>
<tr>
<td>Mount Magazine Images</td>
<td>9</td>
</tr>
<tr>
<td>Mountaintop Black Bears</td>
<td>10</td>
</tr>
<tr>
<td>Mount Magazine Butterflies</td>
<td>11</td>
</tr>
<tr>
<td>CSI: Mount Magazine</td>
<td>12</td>
</tr>
<tr>
<td>Medicinal Plants</td>
<td>13</td>
</tr>
<tr>
<td>Migrating Monarchs</td>
<td>14</td>
</tr>
<tr>
<td>Signal Hill Hike</td>
<td>15</td>
</tr>
<tr>
<td>Greenfield Trail Hike</td>
<td>16</td>
</tr>
<tr>
<td>Benefield Trail Hike</td>
<td>16</td>
</tr>
<tr>
<td>Rim Tour</td>
<td>17</td>
</tr>
<tr>
<td>Will Apple’s Road Trail Hike</td>
<td>17</td>
</tr>
<tr>
<td>Bear Hunter</td>
<td>18</td>
</tr>
<tr>
<td>Exhibit Explorers</td>
<td>19</td>
</tr>
<tr>
<td>Map</td>
<td>20</td>
</tr>
<tr>
<td>Resource Photos</td>
<td>21</td>
</tr>
<tr>
<td>School Reservation Form</td>
<td>22</td>
</tr>
</tbody>
</table>

Written by Don Simons, Interpreter, and Lori Spencer, Volunteer Interpreter, Mount Magazine State Park.

**Education Consultants:**
Pat Yick, Teacher Center Director, WAESC
June Gilbreath, Paris Middle School

First Edition, updated 2005
MISSION STATEMENT

The mission of Mount Magazine State Park is to enhance the quality of life in west central Arkansas by promoting, interpreting, and managing this park’s natural and cultural resources.

The Park Seeks:

- To provide quality historical and cultural education opportunities relating to this area, in particular the first settlers of Mount Magazine.

- To provide quality educational opportunities relating to the natural aspects of the park, specifically the unique geological formation of Mount Magazine and the resulting flora and fauna.

- To provide quality recreational facilities and special activities in sufficient quantity to meet the varied needs of park visitors—while protecting the mountain’s environment.

- To enhance the economic benefit of tourism in the state, in particular west central Arkansas.
Mount Magazine has long been a recreational destination. During the early 1900’s the Skycrest Inn and Buckman Inn were on opposite ends of the top of the mountain, and provided guests with spectacular views, a dance pavilion, and swimming pool. Most residents left during the Great Depression, and the properties on the mountain were managed under the auspices of the USDA Forest Service. Civilian Conservation Corps and Works Progress Administration crews built stone structures that complement the landscape. The famous lodge was one of those buildings. The lodge had everything a tourist could ask of a resort until it burned in 1971.

The feasibility of developing the top of Mount Magazine as a state park was first discussed in 1976. Negotiation with the Forest Service began in 1983. An Environmental Impact Statement was written to outline a plan for development of the mountain with guidelines for managing species of concern. A special use permit was issued, and Mount Magazine became a state park in 1996.

The campground opened Memorial Day 2001, and the Visitor Center in August, four years after the park opened. Mount Magazine State Park consists of 2200 acres, and only one percent will ever be developed. It is managed through a partnership with the USDA Forest Service. Recreational opportunities include miles of trails, camping, hang-gliding, rock-climbing, and biking. A new lodge and thirteen cabins are under construction. Mount Magazine State Park is the product of the vision and dedication of the government, state agencies, federal agencies, and the people of Arkansas who want to protect and enjoy this special place.
CURRICULUM DESCRIPTION

Mount Magazine State Park staff invites you and your students to visit the park and enjoy this unique, valuable resource in the heart of the Arkansas River Valley. Teachers love Arkansas state parks because the parks are places where students can apply what the teacher has taught in the classroom. Our programs support the state curriculum frameworks, and we are happy to work with you to develop customized programs to meet your curriculum needs or the special needs of your students. Arkansas State Parks takes pride in its varied programs for school groups and its support and services for teachers. With advance notice and curriculum guidelines from the teacher, our staff will plan educational experiences that are exciting, and reinforce your classroom goals.

Mount Magazine State Park’s current curriculum is designed for grades 3-8 and is correlated to the Arkansas Curriculum Frameworks for Life Science, Earth Science, Arkansas History, and is in-park only. Most of the park’s school programs are best suited to grades 5-8 because of subjects covered at prior grade levels, and their interest and curiosity in the natural world are high. Students at these grade levels are also better prepared physically for the moderate hiking involved in most programs. Several indoor programs and demonstrations, however, are designed for lower elementary. Specialized programs can be developed specifically for your topic of study with adequate notice.

The park resource is a natural hands-on complement to the classroom. Teachers are encouraged to engage students in pre-visit and post-visit assessment activities that help them maximize their park experience. Interpreters can help you design activities for students upon request.

This packet describes our current program offerings, explains how to make reservations, and guidelines for a memorable experience. Programs are correlated to grades 5-8 Arkansas curriculum frameworks:

**Science:**
Life Science (LS), Earth Science (ES)

**Arkansas History:**
Time, Continuity, and Change (TCC), People, Places, and Environments (PPE), Production, Distribution, and Consumption (PDC), Social Science Processes and Skills (SSPS)

CONCEPTS
The Mount Magazine State Park curriculum emphasizes the concepts of **energy flow**, **ecosystem structure**, **life cycles**, **biodiversity**, **succession**, **Arkansas natural divisions**, and **Arkansas history**. Earth Science, Life Science, and Arkansas History strands from the Arkansas Education Frameworks are correlated to our curriculum and are the core of Mount Magazine’s educational programs.

The following terms are used consistently throughout the visit, depending on your program choice. Since our time is so limited during the field trip, it is most beneficial to the students if they have an exposure to the vocabulary that will be used.

**Science Vocabulary Definitions**

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abiotic</td>
<td>Not biotic, non-living things.</td>
</tr>
<tr>
<td>Adaptation</td>
<td>A trait that enables an organism to survive in its habitat.</td>
</tr>
<tr>
<td>Biotic</td>
<td>Living organisms.</td>
</tr>
<tr>
<td>Bioindicator</td>
<td>An organism whose presence or absence indicates biological quality.</td>
</tr>
<tr>
<td>Carnivore</td>
<td>An animal that eats mostly flesh.</td>
</tr>
<tr>
<td>Community</td>
<td>Populations of plants and animals that inhabit and interact in an environment, each occupying its own niche.</td>
</tr>
<tr>
<td>Constellations</td>
<td>Groups or patterns of stars.</td>
</tr>
<tr>
<td>Diurnal</td>
<td>Active by daylight; opposite of nocturnal.</td>
</tr>
<tr>
<td>Ecology</td>
<td>The study of how living things are related and how they interact and depend on each other.</td>
</tr>
<tr>
<td>Ecosystem</td>
<td>A system that includes living and non-living parts interacting to produce stability in which all living things and their environment are linked by energy and nutrient flow.</td>
</tr>
<tr>
<td>Endemic</td>
<td>Restricted or peculiar to a locality or region (example: the shagreen snail is endemic to Mount Magazine).</td>
</tr>
<tr>
<td>Erosion</td>
<td>Transportation of soil and rock by wind, water, gravity, and ice.</td>
</tr>
<tr>
<td>Food Chain</td>
<td>The path by which energy passes from one living thing to another.</td>
</tr>
<tr>
<td>Food Web</td>
<td>All of the feeding relationships in an ecosystem.</td>
</tr>
<tr>
<td>Fossils</td>
<td>The remains or marks left by ancient life.</td>
</tr>
<tr>
<td>Habitat</td>
<td>An area that provides a living organism with food, water, shelter, and living space in a suitable arrangement.</td>
</tr>
<tr>
<td>Habituated</td>
<td>An unhealthy addiction (example, a bear habituated to human garbage).</td>
</tr>
<tr>
<td>Herbivore</td>
<td>Animal that eats mostly plants.</td>
</tr>
<tr>
<td>Invertebrate</td>
<td>Animal without a backbone.</td>
</tr>
<tr>
<td>Mutualism</td>
<td>Relationship in which both organisms benefit.</td>
</tr>
<tr>
<td>Niche</td>
<td>The function, or job, an organism has in its community.</td>
</tr>
<tr>
<td>Nocturnal</td>
<td>Active at night; opposite of diurnal.</td>
</tr>
<tr>
<td>Omnivore</td>
<td>Animal that eats both plants and animals.</td>
</tr>
<tr>
<td>Organism</td>
<td>A living thing.</td>
</tr>
<tr>
<td>Photosynthesis</td>
<td>Process of converting light energy into chemical energy stored as glucose (food).</td>
</tr>
</tbody>
</table>
Predator— An animal that hunts, kills, and eats other animals.
Prey— Animals that are hunted, killed, and eaten by other animals.
Scavenger— Animal that regularly feeds on dead animals.
Sedimentary— Rock formed in layers from sediment.
Species— A group of organisms that look alike and are capable of producing fertile offspring in nature.
Succession— A gradual, progressive series of changes in the plant and animal life of a community from initial colonization to climax and occurs due to both human and natural disturbances.
Symbiosis— An interactive relationship between two organisms; the type used most often in Mount Magazine State Park programs is mutualism (butterflies and wildflowers).
Vertebrate— Animal with a backbone.
Weathering— The processes that break apart and change rock.

Arkansas Natural Divisions

**Ozark Plateau**—Parts of the region are rugged with long, deep valleys, sharp cliffs, bluffs, and ledges. The principal rock formations are sandstone, shale, and limestone.

**Arkansas River Valley**—Between the Ozarks and the Ouachitas, it is up to forty miles wide. While the valley is somewhat flat, here also is Arkansas' highest mountain.

**Ouachita Mountains**—The geology of the Ouachitas has had a great effect on the forests of the region as sandstone weathers into a sandy soil that favors pine trees

**Delta**—The Delta was once a land of rivers and vast wetlands, and today this area is home to some of the richest farmland in America.

**Crowley's Ridge**—Completely surrounded by the Delta, the ridge "towers" 200 feet. Here, the rivers left a ridge 150 miles long and 5 miles wide.

**Gulf Coastal Plain**—Level and rolling lands, hilly sections, bottoms and occasional prairies are found here. The sandy hills are good sites for pine trees.

History Vocabulary Definitions

**CCC**— Civilian Conservation Corps.
**Homestead**— The home and adjoining land occupied by a family.
**Resettlement**— A place or region reestablished after a legal sanction, natural disaster, or war.
**WPA**— Works Progress Administration.
FIELD TRIP GUIDELINES

SCHEDULING

- Contact the park Interpreter, Don Simons, at the Visitor Center at (479) 963-8502 between the hours of 8:00 a.m. and 5:00 p.m. or email Don.Simons@arkansas.gov, Wednesday through Friday. Direct contact to the Park Interpreter is preferred.

- Visit the Arkansas State Park website at www.ArkansasStateParks.com then click on the Teachers, Schools and Volunteers icon for additional information.

- All programs are free.

DIRECTIONS

- Mount Magazine State Park is on Scenic Highway 309, 16 miles south of Paris, or 10 miles north of Havana. Consider bus time in your field trip plan.

- The road up the mountain is steep and curvy. Travel time to the park is at least 30 minutes from Paris and 20 minutes from Havana.

- Upon arrival at the park, check in at the Visitor Center, allow time for restroom breaks and try to keep the group on time.

Mount Magazine State Park is open year-round for programs, but outdoor school programs focusing on natural history and cultural history need special consideration. For flora and fauna school programs April, May, and September are the best months. Indoor programs can be scheduled throughout the school year. Small groups, one class or less, are recommended for maximum benefit for students, allowing more hands-on activities and individual attention to student needs. Long hiking lines and large groups usually result in disappointment and failure to achieve curriculum goals.

When you call or email to schedule your visit, please have the following information ready:

- Your name
- School name, address, phone number, your email address
- Prep period or best time to contact you
- Number of students and grade level
- Preferred and alternate trip dates
- Estimated time of arrival and departure
- Educational objectives; program choices from this packet
- Special needs for students with disabilities
INCLEMENT WEATHER
In bad weather, Mount Magazine State Park has a covered pavilion and indoor classroom that can accommodate groups up to of 75. Inclement weather may require changes in activity plans, and most of our outdoor programs have an indoor alternative. Due to park program demand, rescheduling is difficult. Check with the interpreter before the visit if the forecast is questionable. Notify the park immediately if circumstances require visit cancellation. Inform students as early as possible of weather changes so they may dress appropriately.

LUNCH AND OTHER SERVICES
School groups can bring sack lunches and have the use of the covered pavilion at the Greenfield Picnic Area. Vending machines are located in the Visitor Center. Restrooms are located in the Visitor Center, Greenfield Picnic Area, and Campground.

Because school programs are planned around the lunch hour, discuss this time with the Park Interpreter prior to visit.

SAFETY AND RESPONSIBILITY
Dressing for adverse weather is just one aspect of safety. Students participating in school programs at Mount Magazine State Park are expected to take a certain amount of responsibility for their behavior, even though they are under constant supervision from teachers and chaperones. Arkansas state parks are a valuable resource, and belong to each person. Students are encouraged to take responsibility for helping to keep their park clean and leave it better than they found it. The Mount Magazine State Park staff endeavors to instill these attitudes of stewardship in each program.

CHAPERONE EXPECTATIONS
It is required that students have proper supervision. One chaperone for every ten students is ideal. Some of the terrain on Mount Magazine State Park is rugged and dangerous. Students should not be allowed to wander away from the group. All chaperones should clearly understand their disciplinary duties, dress appropriately, and stay with the students during the school visit.

Class discipline is the teacher’s responsibility and from whom chaperones take their cue. This allows interpreters to do their job to the maximum benefit for each student. Please explain to all students that appropriate and orderly behavior is expected during their visit. Students should take pride in their roles as representatives of their school. Use simple rules of respect for park resources and courtesy toward each other, keeping in mind that there are usually other visitors at the park at the same time. ALL PLANTS, ANIMALS, ROCKS, AND ARTIFACTS ARE PROTECTED BY STATE LAW AND SHOULD NOT BE DISTURBED OR REMOVED. This reinforces the attitude of stewardship described above.
STUDENT INFORMATION

Students’ comfort is important to the learning process. This can be achieved through proper communication both in the classroom and at home. Once the students arrive at the park, their time is very limited. Beginning the program on time will enhance their learning experience and enjoyment and minimize problems.

CLOTHING
- **Dress appropriately.** It is best to watch the weather forecast several days in advance.
  Layers are best, including *long pants and socks*.
- The most **sturdy shoes** students have, *no open-toed shoes*, expect them to get dirty.
- **Rain gear with head protection** (if in weather forecast), no umbrellas.
- **Coat or jacket** (seasonally; even if it is calm and clear in the valley, it can be windy on the mountain). *It is usually 10-15 degrees cooler on Mount Magazine.*
- Hat or visor.

ADDITIONAL GEAR IN A BACKPACK
- Pencil and notebook or clipboard (to write on)
- Water bottle (1 liter recommended)
- Camera (optional)
- **Insect repellent** (warm weather months)
- Sunscreen (warm weather months)

LEAVE AT HOME
- TV, Radio, tape or CD player, Electronic games
- Pocket or sheath knives
- Umbrella
- Loose jewelry

STUDENT PREPARATION
Discuss with students:
- Time and date of departure from school
- Educational objectives
- Lunch time
- Free time
- Any school requirements such as permission slips
- Field Trip supplies
- Dress code and appropriate dress
- Money for gift shop, vending
- Departure from park and arrival at school
- Rules of teacher and park, disciplinary action
SCHOOL PROGRAMS
In-park programs available Wednesdays, Thursdays, and Fridays only.

Mount Magazine Images

Mount Magazine is a special place in the Arkansas River Valley inviting nature lovers and adventurers.

Objective: Students will learn about the natural and cultural history of Mount Magazine and the Arkansas River Valley.

Length: 45 minutes-1 hour

Audiovisual program in Visitor Center classroom. Maximum 75 people.

This slide presentation is an introduction to Mount Magazine, featuring colorful photos of the Mountain during all four seasons. It is often used as an orientation program for first-time visitors. Included are many photos of wildflowers, insects, and other wildlife. This program is designed to help students pull their other activities together to achieve an overall understanding of the Arkansas River Valley and Mount Magazine's role in history.

K-4 Frameworks:
LS. 2.4, 2.5, 2.8, 2.10, 3.3, ES. 2.3, TCC. 1.3, 1.4, PPE. 2.1, 2.3, PDC. 1.2

5-8 Frameworks:
LS. 2.3, 2.4, 2.5, 2.9, 2.12, 3.2, ES. 2.4, 3.8, TCC. 1.4, PPE. 2.1, 2.3, PDC. 1.4
Mountaintop Black Bears

*Mount Magazine has a high density of black bears, a vital connection between Arkansas’s past and present.*

**Objectives:** Students will learn about the role black bears play on the mountain and how they influenced human activity. Students will learn about bear life cycles, requirements, and management on the mountain.

**Length:** 45 minutes-1 hour

Audiovisual program in Visitor Center classroom. Maximum 75 people.

A signature park program, Mountaintop Black Bears addresses the status of the mountain’s bears. Colorful and fun, students will hear stories about bear encounters in the park, and just how similar black bears and people really are! Students calculate how much food individual bears eat and make other calculations using “bear math”. This activity can be introduced during the program, or makes an excellent post-trip conclusion to your bear unit.

**K-4 Frameworks:**
LS. 2.1, 2.3, 2.4, 2.5, 2.7, 2.8, 2.9, 2.10, 3.3, TCC. 1.4, 2.1, 2.3, 2.4, PDC. 1.2

**5-8 Frameworks:**
LS. 2.3, 2.4, 2.5, 2.7, 2.8, 2.9, 2.11, 2.12, 3.2, 3.8, TCC. 1.4, PDC. 1.4

**Extension:**
**How Many Bears Can Live in this Forest?**  *Project WILD*

**Objectives:** Students will define a limiting factor, and describe how limiting factors affect animal populations.

**Length:** 20-40 minutes; indoors or outdoors

Students become “bears” to look for one or more components of habitat during this physically involved activity.
Mount Magazine Butterflies

Over 95 butterfly species have been recorded in Mount Magazine State Park, a sign of a unique and healthy ecosystem.

Objectives: Students will learn about Mount Magazine butterfly diversity as they learn to identify several species. Students will learn about butterfly life cycles, adaptations for survival, and niche on Mount Magazine. Students will learn about ongoing research and careers in the field of entomology and botany.

Length: 45 minutes

Audiovisual program in Visitor Center classroom. Maximum 75 people.

This slide presentation is a colorful introduction to butterfly biology. It features several butterflies for students to learn to identify, including Diana Fritillaries, Mount Magazine’s “showcase” butterfly.

K-4 Frameworks:
LS. 2.1, 2.5, 2.8, 2.9, 2.10, 3.3, ES. 3.3

5-8 Frameworks:
LS. 2.3, 2.4, 2.5, 2.7, 2.8, 2.9, 2.11

Extension:
Mount Magazine Butterflies Hike

Objectives: To view butterflies and signs of their life cycles in their natural habitat.

Length: 1 hour; groups of 20 or fewer in rotation

Recommendations: The best trails to use are Will Apple’s Road or Signal Hill trail following the slide presentation. The best time to view these trails is April-October. The hike can be somewhat strenuous, no open-toed shoes allowed. Students should carry water bottles to prevent dehydration. Use of The Peterson Guide to Eastern Butterflies, Butterflies and Moths Golden Guide, and the Mount Magazine Butterfly Checklist are encouraged.
CSI: Mount Magazine

Knowledge is power!

Note: Designed for grades 2-4.

Option 1: Inspector Insector

Objectives: The Inspector, an agent from the Insect Division, is trying to solve a case. Your class will help unravel the Inspector’s evidence, solve the crime, and in the process learn about some insects’ lives. This program can be either an introduction or conclusion to your insect unit. A hike focusing on insects and plants can be scheduled for a complete field trip.

Length: 45 minutes, group activity, indoors or outdoors

K-4 Frameworks:
LS. 2.3, 2.4, 2.5, 2.7, 2.8, 2.10, 3.1

Option 2: Officer Paw

Objectives: This officer from the Mammal Division is trying to solve a case. Your class will help unravel Officer Paw’s evidence, solve the crime, and in the process learn about some mammals lives. This program can be either an introduction or conclusion to your mammal unit. A hike focusing on tracks and scat can be scheduled for a complete field trip.

Length: 45 minutes, group activity, indoors or outdoors

K-4 Frameworks:
LS. 2.3, 2.4, 2.5, 2.7, 2.8, 2.10, 3.1
**Medicinal Plants**

*Native Americans and settlers relied on many plants for medicine, many of which have been found useful by modern science.*

Objectives: Students will learn about plant diversity, both species and use, as they learn to identify several common Arkansas plants. Students will learn about historic plant uses by both Native Americans and settlers, with positive and negative results. Students will learn about science studies testing medicinal plants, and “home-made” remedies. *No plants will be eaten during this program.*

Length: 45 minutes-1 hour

Audiovisual program in Visitor Center classroom. Maximum 75 people.

This slide presentation is an introduction to medicinal plants, a popular subject. It features several wildflowers, trees, and ferns. Emphasis on importance of proper identification, historical and modern use, and caution.

**K-4 Frameworks:**
LS. 2.1, 2.4, 2.5, 2.8, 2.10, 3.3, ES. 3.1, 3.2, 3.4

**5-8 Frameworks:**
LS. 2.3, 2.4, 2.5, 2.7, 2.8, 2.9, 2.11

**Medicinal Plants Hike**

Objectives: To learn to identify several edible and medicinal plants and to learn their specific advantages and disadvantages. Teachers may choose the hike instead of the slide program if an outdoor program is preferred.

Length: 1 hour; groups of 20 or fewer in rotation; 1 mile

Recommendations: The best trails to use are Will Apple’s Road or Signal Hill trail either following the slide presentation. The best time to view these trails is April-October. The hike can be somewhat strenuous, no open-toed shoes allowed. Students should carry water bottles to prevent dehydration. *The Peterson Guide to Medicinal and Edible Plants, Missouri Guide to Wildflowers, and Wildflowers of Arkansas* are recommended references. *No plants will be eaten.*
Migrating Monarchs (3-part program)

Monarch migration is a biological phenomenon on the mountain every year.

Objectives: This program is only offered during the last week of September, when Monarch migration peaks on Mount Magazine. Students will learn about the monarch life cycle, biology, and survival as they participate in hands-on research. Students will learn to properly handle Monarchs. Students will learn about ongoing Monarch research and conservation efforts.

Length: 1-3 hours. Special Notes: This program is only offered to small groups such as G/T students, 20 or less, in September, when Monarch migration usually peaks on Mount Magazine. Reservations are required. Consider your students’ learning styles when choosing an option for Part I.

Part I, Option 1: Minnie the Monarch
Meet Minnie the Monarch butterfly, a high-energy program presented in first-person, focusing on the monarch life cycle, biology, and migration as seen through the monarch’s point of view. The interpreter is in full butterfly costume, so the program is part demonstration, part audiovisual program in the Visitor Center classroom. This is designed for lower elementary students. 20-30 minutes

Part I, Option 2: Without Borders
This colorful slide presentation presented in Visitor Center classroom focuses on the monarch life cycle, biology, and migration. This is designed for upper elementary and middle school grades. 30 minutes

Part II: Monarch Tagging
Students participate in hands-on scientific research as they tag monarchs on their journey to Mexico. Tagging and proper handling of butterflies and larvae will be covered immediately after A/V presentation (15-20 minutes). We will attempt to net and tag butterflies either on a trail or roadside after lunch. 30-45 minutes

Part III: Monarch Maze
Students “become” monarchs and try to survive the 2,500 mile migration. In this maze of chance, students use beans and roll dice at different stations throughout their journey to experience a Monarch’s life. They will draw conclusions on their survival and compare it to real Monarch data. May be done indoors or outdoors. Good for counting and critical thinking, somewhat physical. Lower elementary classes may need reading assistance at each station. 20 minutes

K-4 Frameworks:
LS. 1.2, 1.3, 2.1, 2.3, 2.4, 2.5, 2.8, 3.3

5-8 Frameworks:
LS.1.1, 2.3, 2.4, 2.5, 2.7, 2.8, 2.9, 2.11, 2.12, 3.1, 3.2, 3.4, 3.5
Signal Hill Trail Hike

Signal Hill, Arkansas’s highpoint, is a forest with a story, and each season is a monumentally unique experience.

Objectives: This shady trail meanders through the woods to Arkansas’s highpoint. Signal Hill is covered by oak-hickory forest with wildflowers, ferns, and other wildlife. Students will learn about the natural divisions of Arkansas. The concepts covered in this program are versatile; mountain formation and rock identification can be covered, and some of the mountain’s history may be included. Succession, fire as a management tool, and fire ecology will be covered in burn years.

Length: 1-1½ hours, small groups of 20 or fewer, 1 1/4 mile

Recommendations: The best time to view this trail is April-October. The hike can be somewhat strenuous, even with frequent stops. Refer to the Student Information List on page 8 for equipment and clothing requirements.

K-4 Frameworks:
LS. 2.1, 2.5, 2.8, 3.3, ES. 2.1, 2.2, 2.3, 3.3, TCC. 1.4, 2.4, PPE. 1.2, 2.3

5-8 Frameworks:
LS. 2.4, 2.5, 2.8, 2.9, 2.11, 2.12, ES. 1.5, 2.1, 2.4, 2.5, 3.8, TCC. 2.1, PPE. 2.1
Greenfield Trail Hike

*Shade-loving plants are an important part of the forest.*

**Objectives:** The Greenfield Picnic Area was once a family farm. Students will view and learn about history and shade-loving plants including wildflowers, trees, and ferns. Students will learn about ecosystem structure and succession.

**Length:** 1 hour, 1 mile, not a loop.

**Recommendations:** The best time to view this trail is April-October. The hike is moderate, with very little incline. Refer to the Student Information List on page 8 for equipment and clothing requirements.

K-4 Frameworks:
LS. 2.1, 2.5, 2.8, 3.3, ES. 2.1, 2.2, 3.2, 3.3, TCC. 1.4, 2.4, PPE. 1.2, 2.3

5-8 Frameworks:
LS. 2.4, 2.5, 2.9, 2.11, 2.12, TCC. 2.1, PPE. 2.1

Benefield Trail Hike

*Weedy and shrubby vegetation is a product of secondary succession caused by human disturbance in this area.*

**Objectives:** This area was a family farm before the Great Depression. The WPA built a campground here, which was later turned into a picnic area. Several historical structures are still evident and recently discovered. After crossing Highway 309, the west trail leads to a wildlife pond. Students will view and learn about human history, plants, and animal tracking. Students will learn about ecosystem structure, human and natural succession.

**Length:** Three loops; west Benefield loop 1 miles, east Benefield loop .9 miles, Bear Hollow Trail .6 miles, about 1 hour each

**Recommendations:** There are two loops to the Benefield Trail—the west loop, which passes a wildlife pond, and east loop, which leads to stone steps created by the WPA and provides scenic views of the Petit Jean River Valley. The east loop is recommended for older children as it is a high cliff area. The best time to view these trails is April-October. The hike is easy terrain. Refer to the Student Information List on page 8 for equipment and clothing requirements.

K-4 Frameworks:
LS. 2.1, 2.5, 2.8, 3.3, ES. 2.1, 2.2, 3.2, 3.3, TCC. 1.4, 2.4, PPE. 1.2, 2.3

5-8 Frameworks:
LS. 2.4, 2.5, 2.9, 2.11, 2.12, TCC. 2.1, PPE. 2.1.
**Rim Tour**

*Mount Magazine has eleven unique ecosystems.*

**Objectives:** This driving tour by bus or caravan will stop at several overlooks from which students can see three of Arkansas’ six natural divisions. It can be combined with a hike up Signal Hill. Several different ecosystems are found here, and each supports a unique diversity of life. Students will learn about the formation of the mountain, its unique geology, the plants and the wildlife found at this higher elevation.

**Length:** 1 hour

**K-4 Frameworks:**
LS. 2.1, 2.4, 2.5, 2.8, 3.3, TCC. 1.4, 2.4, PPE. 1.2, 2.3

**5-8 Frameworks:**
LS. 2.4, 2.5, 2.8, 2.9, 2.11, 2.12, ES. 1.5, 2.1, TCC. 2.1, PPE. 2.1

**Will Apple’s Road Trail Hike**

*Sandstone fences, historic ruins, and abundant wildlife reflect secondary succession caused by human disturbance on Mount Magazine.*

**Objectives:** This trail was one of the first roads to the mountain’s summit. Students will view and learn about historic home sites, wildflowers, medicinal/edible plants and trees, escaped domestic flowers, woodland songbirds, stone fences, ferns, and animal tracking. Students will learn about ecosystem structure, human and natural succession.

**Length:** 1 hour, small groups of 20 or fewer in rotation, 1 mile, not a loop.

**Recommendations:** The best time to view this trail is April-October. The hike is moderate, with very little incline, no open-toed shoes allowed. Students should carry water bottles to prevent dehydration. *Trees, Vines and Shrubs of Arkansas, Wildflowers of Arkansas, Missouri Guide to Wildflowers,* and any of the Golden Guide and Falcon Guide series are recommended.

**K-4 Frameworks:**
LS. 2.1, 2.4, 2.5, 2.8, 3.3

**5-8 Frameworks:**
LS. 2.4, 2.5, 2.8, 2.9, 2.11, 2.12, ES. 1.5, TCC. 2.1, PPE. 2.1
Bear Hunter

*Men carved a living out of hunting bear and trading pelts, claws, and bear fat in the Arkansas Territory and were affected by the Louisiana Purchase.*

**Objectives:** Students will learn from a bear hunter about life in the early 1800’s, including early settlements in the Mount Magazine region, wildlife abundance and value, and exploration of the Louisiana Purchase lands.

**Length:** 30 minutes

Living history demonstration; can also accompany the Mountaintop Black Bears program.

**K-4 Frameworks:**
LS. 2.10, ES. 3.3, TCC. 1.1, 1.3, 1.4, 2.2, 2.3, 2.4, PPE. 1.2, 2.1, 2.3, PDC. 1 2.,1.3, SSPS. 1.4

**5-8 Frameworks:**
LS. 2.12, TCC. 1.4, 2.1, 2.3, PPE. 1.1, 2.1, 2.2, 2.4, PDC. 1.2, SSPS. 1.2
**Exhibit Explorers**

*Mount Magazine was shaped by geological events and hard-working people.*

**Objectives:** Through self-directed exhibits, students will learn about the natural and cultural history of Mount Magazine in the Arkansas River Valley.

**Length:** 20-40 minutes

**Special conditions:** small groups are preferred; plan on 20-40 minute rotations. Pad and pencils needed.

**K-4 Frameworks:**
LS. 2.1, 2.4, 2.5, 2.7, 2.8, 2.10, ES. 2.1, 2.2, 2.3, 3.2, 3.3, TCC. 1.1, 1.4, 2.1, 2.3, 2.4, PPE. 1.2, 2.1, 2.3, 2.5, 2.6, PDC. 1.2, 1.3, 1.6, SSPS. 1.2, 1.4

**5-8 Frameworks:**
LS. 2.4, 2.5, 2.8, 2.9, 2.11, 2.12, ES. 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 3.8, TCC. 1.1, 1.4, 2.1, PPE. 2.1, 2.2, 2.4, PDC. 1.2, 1.4, SSPS. 1.2, 1.4
WELCOME TO MOUNT MAGAZINE STATE PARK!

Visitor Center; includes 75-person classroom, restrooms, exhibits, wildlife viewing area, gift shop and vending machines.

Pavilion at Greenfield Picnic Area. Restrooms are nearby.
Mount Magazine State Park
School Group Reservation Form

Contact Information:

School Name________________________ Contact Person______________________
School Address______________________City/State/Zip________________________
Daytime Phone & Prep Period___________Email______________________________
# of students__________________ grade(s)_____
# of teachers/chaperones_______________

Dates of Field Trip:
1st choice______________ 2nd choice_____________Arrival Time____________
Lunch Time___________ Gift Shop Time_________Departure Time__________

Program Requests:
___Mount Magazine Images  ___CSI: Inspector Insector
___Arkansas Black Bears    ___CSI: Officer Paw
___Mount Magazine Butterflies ___Signal Hill Hike
    ___ Hike extension    ___Greenfield Hike
___Medicinal Plants     ___Benefield Trail Hike
    ___ Hike extension    ___Rim Tour
___Migrating Monarchs    ___Will Apple’s Road Hike
    ___Part 1: Minnie Monarch ___Bear Hunter
    ___Part 1: Without Borders ___Exhibit Explorers

Special Programs:

I am interested in a specific program or topic not listed above. I would like a program
on___________________________________________________________________

Please list any special accommodations or needs your class may have:_____________
______________________________________________________________________

Return this form to Mount Magazine State Park, or preferably, use to organize your field trip
plans before calling or emailing the park.

Mount Magazine State Park
16878 Highway 309 South
Paris, AR 72855
(479) 963-8502
FAX (479) 963-1031
Don Simons, Interpreter, Don.Simons@arkansas.gov
Mount Magazine State Park
16878 Highway 309 South
Paris, AR 72855
(479) 963-8502