

# **EDUCATOR'S GUIDE**

# MONTEZUMA CASTLE NATIONAL MONUMENT TUZIGOOT NATIONAL MONUMENT

Post Office Box 219 Camp Verde, Arizona 86322-0219 (928)567-3322

NATIONAL PARK SERVICE DEPARTMENT OF THE INTERIOR



**JULY 2005** 

#### ACKNOWLEDGMENT

This Educator's Guide is the result of a strong vision and much labor. Hundreds of children visit the monuments annually as part of their educational curriculum. Steve Sandell, former chief ranger, created the idea of the guide to teach about Montezuma Castle, Montezuma Well, and Tuzigoot and other archeological sites and surrounding natural environments by using appealing exercises for school children and their teachers. Park rangers who prepared the various lessons from their own experiences and modeling other guides were John Reid, Bob Del Carlo, Jose Castillo, Sandra Breach, and Tanya Morgan. Susan Wells and Trinkle Jones, archeologists, reviewed the cultural lessons. Park ranger Greg Webb compiled the mailing list from the many school groups that visited us during the past years. Park ranger Skip Larson worked with the design artist on the final version. Amanda Summers of Amanda Summers Design used her layout and graphics skills to design this artful product. Finally, we would not have been able to make the Educator's Guide without the financial donations from Western National Parks Association and support of Jon Fistler, field manager in the monuments, and from the Tucson main office LeAnn Simpson, executive director and Scott Aldridge, chief operations officer. This was a team effort and thanks to you all.



#### United States Department of the Interior NATIONAL PARK SERVICE

Montezuma Castle and Tuzigoot National Monuments
Post Office Box 219
Camp Verde, Arizona 86322



September 1, 2003

Dear Educator;

We are glad to provide this guide to assist you in preparing for your visit to Montezuma Castle and Tuzigoot National Monuments. All activities meet State of Arizona Curriculum standards.

Your students will learn more from their visit if they spend some time preparing for it. As an educator, you are the essential link to a successful program. This guide contains information on selected topics, classroom exercises, and suggested readings. Its purpose is to:

- 1. Provide educators ideas to assist in the development of units on the National Park Service, Montezuma Castle and Tuzigoot National Monuments, the cultural and natural resources of the Verde Valley, and the prehistoric Sinaguan culture.
- 2. Increase interest and anticipation among your students.
- 3. Provide a foundation of knowledge that you can build upon.

We are looking forward to having you and your students visit the monuments, and hope the information provided will be of benefit for all involved.

Sincerely,

Kathy M. Davis Superintendent

## PARK RECOMMENDATIONS

The mission of the National Park Service is two-fold: to protect park resources and to provide for an enjoyable and educational experience for all visitors. Please remember that natural and cultural resources are fully protected by law. Nothing can be removed from the monuments.

Please stay on trails. The ecology, landscape, and archeological sites of the monuments are extremely fragile.

Elementary school groups should strive to provide one adult chaperone for every five students to ensure adequate supervision. One chaperone for twelve high school students is recommended.

If staffing permits a Ranger will present a brief orientation to the site upon request.

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# Introduction

"To conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations."

The above quotation is an excerpt from the 1916 organic act that provided for the formation of the National Park Service as a separate bureau of the Department of the Interior. This statement expresses the basic concept of preservation that is integral to the National Park Service

The Park Service preserves and protects the spectacular natural wonders, wildlife, and places of historical and cultural significance that are a part of the rich heritage we enjoy in this country.

National parks offer exciting opportunity to enrich curriculum and provide authentic learning experience for students. These experiences give students a sense of place and encourage them to take greater responsibility for protecting their natural and cultural heritage. Education is the National Park Service's best hope for a bright and protected future.

Montezuma Castle and Tuzigoot National Monuments have undertaken the production of this educators' guide to provide teachers with the tools and ideas for the development of classroom lessons that will enhance students' understanding and appreciation of the National Park Service mission, and of the vast cultural and natural heritage of the Verde Valley of Arizona.

Information in this guide is designed to build anticipation for visits to the monuments through pre-visit, on-site, and post-visit activities. Students who are unable to visit in person will have an opportunity to experience the monuments' resources through the activities and audiovisual resources available in this guide.

This educators' guide contains educational aids pertaining to several themes and disciplines, including the Sinagua and other Southwestern cultures; archeology and pre-historic agriculture; and natural history topics, including riparian habitats, geology, mammals, birds, and reptiles. The National Park Service concept of preservation will also be covered.

The materials in this guide will be geared to provide tools for grades 3–8, and will be applicable to multiple disciplines, including science, history, math, reading, writing, and spelling.

## The National Park Service

The establishment of Yellowstone National Park on March 1,

1872, began a unique American tradition of preserving nationally significant resources in a system of federally protected and administered areas.

The National Park Service ensures that American's most spectacular natural and cultural features will remain secure for the use. enjoyment, and inspiration of future generations. Marveling at the awesome view from the rim of the Grand Canyon, gazing at the clouds swirling around the towering white summit of Mount Rainier, and reveling in the beauty of the vast deciduous forest cloaking the mountains of the Blue Ridge all provide opportunities for reflection. Enjoying the thrill of viewing wildlife as diverse as grizzly bears and bald eagles, and experiencing places of historical and cultural significance such as Gettysburg Battlefield National Military Park and the ancient cliff dwellings of Mesa Verde National Park are all part of what the national parks are about.

These places are a part of the rich heritage we enjoy in this country, and are protected and preserved for the enjoyment of our generation and generations to come. Students should remember that it is not only harmful, but also illegal, to deface or remove any plants, animals, rocks, or artifacts from the parks. "Take only pictures, leave only footprints."

There are over 380 National Park units in the United States, including two parks in the Verde Valley of Arizona. The National Park Service is dedicated to preserving America's special places. These are places where we can connect with our heritage. They comprise a wonderfully diverse group of classrooms in which people of all ages can learn about the timeless processes of nature, the evolution of American society, and the importance of stewardship. The national parks are our legacy and our future.

# MONTEZUMA CASTLE AND TUZIGOOT NATIONAL MONUMENTS Instructions for an Educational Fee Waiver

For an uncomplicated application process, please submit the following four items at least 2 weeks in advance:

- 1. Provide the course number, description and/or a copy of the course description from your school catalog or an outline of student work required for K-12.
- 2. Provide a copy of the course curriculum or lesson plan (only the portion that describes your studies in the Monuments; no travel itinerary)
- 3. Documentation of your official recognition as an educational institution.
- 4. Completed application form (on page 10).

#### NATIONAL PARK SERVICE REGULATIONS

These guidelines are to be followed in granting an educational fee waiver. Bona fide educational or scientific institutions may qualify if the following conditions are met.

- 1. Current official documentation of recognition as an educational institution by a Federal, State or local government entity. Generally, the government body is the one that is responsible for education or accreditation activities. You may also provide current official documentation attesting to an educational tax exemption by the State tax authority or the Internal Revenue Service. It is insufficient to state or imply your accreditation on official letterhead.
- 2. There must be a direct relationship between the visit purpose and the use of the Monuments. A general statement to the effect that the visit is for "educational purposes" is *insufficient*. An explanation of your educational objectives and how they relate directly to resources located within the Monuments is required. (Course outlines, lesson plans, or a curriculum copy meet this requirement.)
- 3. The applicant is **providing educational credit hours based on a specific course of instruction.** (Catalog description with course number and credits or an outline of student work meets this requirement.)

# APPLICATIONS MUST BE RECEIVED AT LEAST 2 WEEKS IN ADVANCE OF THE ANTICIPATED VISIT. APPLICATION FORM IS ON PAGE 10.

If the application is approved, the group's official will receive a copy of the application with an approval signature. Please present the approved application at the visitor center front desk(s) upon your arrival.

Mail application to: Montezuma Castle and Tuzigoot National Monuments
P.O. Box 219
Camp Verde, AZ 86322
FAX: 928-567-3057 or 928-567-3597



# United States Department of the Interior

# NATIONAL PARK SERVICE Montezuma Castle and Tuzigoot National Monuments Post Office Box 219 Camp Verde, Arizona 86322

#### **EDUCATIONAL FEE WAIVER APPLICATION**

The National Park Service will grant a fee waiver to a school group or other bona fide educational institution. To obtain a waiver certain criteria must be met.

1. Is this group recognized by a Federal, State, or local government as a bona fide educational or scientific institution?

If yes, please provide documentation from that government body stating your group's official recognition (accreditation certificate or letter from a government body attesting to the legitimacy of the school).

Note: An applicant who has been granted an <u>educational tax exemption</u> by the Internal Revenue Service or similar State tax authority will qualify for a fee waiver.

A general statement to the effect that the visit is for "educational purposes" is **insufficient** by

2. The applicant is required to provide a statement as to the educational purpose of the visit. The visit must relate to the resources of either Montezuma Castle or Tuzigoot National Monuments.

<u>itself</u> . Please explain below <b>WHAT</b> the monument resources.	ducational purpose entails and HOW it relates to the
	·
Applicant Signature	National Park Service Approving Official
DATE	
	FAX: 928-567-3057 or 928-567-3597
Name of Organization	
	and Time of Visit
Number of Faculty/Sponsors	
Address	
Please circle all locations to visit: Montezuma Castle	
Telephone ()	
Please Note: If a fee waiver is not granted, the admi	ion fee to Montezuma Castle or Tuzigoot National

YOU MUST HAVE THIS FEE WAIVER IN YOUR POSSESSION WHEN YOU ARRIVE.

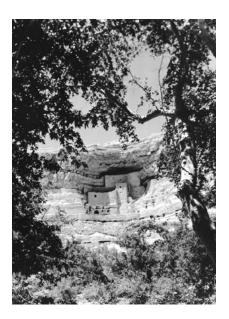
Monument is \$3 per adult; children 16 and under are free. If you have any questions, please contact the

Educational Fee Waiver Coordinator at (928) 567-3322 ext. 23.

# The National Monuments

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#### Montezuma Castle National Monument



Testled into a limestone recess high above the floodplain of Beaver Creek in the Verde Valley stands one of the best-preserved prehistoric structures in North America. The five-story, 20room cliff dwelling was home to a creative and resilient people called the Sinagua. The Sinagua were

part of a culture that flourished in the American Southwest long before Columbus landed on these shores.

With heightened concern over the possible vandalism of fragile prehistoric sites, Montezuma Castle became a major force in the nation's preservation movement with its proclamation as a national monument. The castle was described in the December 1906 proclamation as "of the greatest ethnological and scientific interest."

Early settlers to the area assumed that the imposing structure was connected to the Aztec emperor Montezuma, but in reality the cliff dwelling had been abandoned almost a century before Montezuma was born.

Sinaguan culture was a synthesis of borrowed elements adapted from sur-

rounding ancestral Pueblo, Mogollon, and Hohokam cultures.

The Sinaguan made their living from farming, hunting, and gathering. They adopted irrigation techniques from their Hohokam predecessors, and grew crops of corn, beans, squash and cotton. They took advantage of the rich diversity of the Verde Valley to supplement their crops by hunting and by gathering native plants. Construction of Montezuma Castle began in the early 1100s. The castle reached its present size by the 1300s; and it was occupied for another century after that. In the early 1400s, the Sinagua abandoned the valley for reasons that remain unclear to this day.

Montezuma Castle is located along the banks of Beaver Creek, a small tributary of the Verde River. The green ribbons of trees, shrubs, and grasses that grow along water courses like Beaver Creek are called riparian zones, and are among the most productive ecosystems in the world, supporting a wide variety of plant and animal life. Riparian areas have been called "streams of life," providing food, water, breeding grounds, wintering habitat, and migration corridors for a variety of birds, and serving as a refuge for mammals, reptiles, and amphibians. The Sinaguan culture took advantage of this rich riparian habitat along Beaver Creek for more than 600 years, utilizing the diversity of plant and animal life to provide for their livelihood.

Montezuma Well, a detached unit of Montezuma Castle National Monument is a limestone sinkhole formed long ago by the collapse of an immense underground cavern. Over 1.5 million gallons of water a day flow continuously, providing a lush, verdant oasis in the midst of a desert grassland. The waters of the well contain several forms of plant and animal life not found anywhere else in the world. This unique habitat may be due to constant, large quantities of warm water, which enter through fissures fed by underground springs. The constant water level and temperature create a stable environment that supports this unique habitat.

Prehistoric Hohokam and Sinaguan cultures made use of this abundant and reliable water source to irrigate their crops. Remains of their ancient irrigation canals can still be seen today. The surrounding uplands provided them with diverse wildlife and native edible plants as a supplement to their agricultural products.

## **Tuzigoot National Monument**

Overlooking a sweeping view of the Verde River, Tuzigoot National Monument is one of the largest pueblos built by the Sinagua. Tuzigoot, an Apache word meaning, "crooked water," was built and inhabited between A.D. 1100 and 1400.

The pueblo consisted of 110 rooms, including second- and third-story structures, and may have housed more than several hundred inhabitants. Within sight of Tuzigoot are the ruins of six other pueblos that give



some indication of the concentration of population in the Verde Valley at the beginning of the 14th century.

The Sinagua people who lived at Tuzigoot made their living through a combination of hunting, gathering, and farming. The importance of the Verde River to the Sinagua is quite evident, because its waters helped to create the fertile floodplain necessary for agriculture. The river also provided the mud and clay utilized in the mortar for plastering the limestone walls of the village.

Tuzigoot National Monument reveals excellent examples of Arizona Uplands plants and animals, as well as examples of the riparian ecosystem of the Verde River. Tavasci Marsh, an altered wetland area adjacent to the river below Tuzigoot, is one of the few freshwater marshes found in Arizona. It is managed by the Arizona Game and Fish Department as a wildlife sanctuary, and is presently undergoing restoration. The marsh is a critically important habitat for birds and other wildlife.

A highlight of a visit to Tuzigoot National Monument is the unique, small, old-style museum. The museum houses many original Sinaguan artifacts as well as historical artifacts. The displays and coverage of the archeology and history truly magnify the importance of this special site in the Verde Valley of Arizona.

### **YOUR VISIT**

#### Montezuma Castle National Monument

Montezuma Castle National Monument is located near Camp Verde, Arizona, approximately 50 miles south of Flagstaff, Arizona. The park can be reached by taking Exit 289 off Interstate 17.

The park is open every day of the year. Winter hours: 8:00 am to 5:00 pm. Summer hours: 8:00 am to 6 pm. Over 700,000 visitors come to Montezuma Castle National Monument each year. The heaviest visitation occurs during the spring, while December and January are the slowest months of the year.

Educational groups that wish to visit the site may qualify for a fee waiver. Accredited educational groups must submit in writing a brief statement describing the educational purpose and relevance of the visit and request a fee waiver form. Please mail or fax request to park headquarters at:

National Park Service Montezuma Castle National Monument P.O. Box 219 Camp Verde, Arizona 86322 Fax: (928)564-3597 Fee waiver forms may also be requested by calling (928)567-3322. Off-site programs for Verde Valley area schools are also available on request.

Upon arrival at Montezuma Castle National Monument, school groups receive a short orientation program from park rangers. A junior ranger program is available upon request and children can complete several activities from the junior ranger booklet and earn their badge.

The park visitor center contains a small museum displaying artifacts found on the site. Rangers are available to provide information and assistance. Programs are provided as staffing levels permit. There is a level, paved trail ½ mile in length. Wayside exhibits along the self-guiding trail describe the cultural and natural history of the site. A diorama/audio program depicts the interior view of the cliff dwelling.

The visitor center and most of the paved trail are handicapped accessible. A portion of the Castle A trail is too steep for wheelchairs, and is so marked. Audiocassettes and braille text are available for the visually impaired.

Allow approximately 45 minutes to one hour to visit the Castle. Generally the heaviest visitation to the site occurs between 10:00 am and 1:00 pm, due to heavy commercial tour-bus activity. To more fully enjoy your visit, try planning around this time period.

Montezuma Castle National Monument protects and preserves the cultural and natural resources that you come to see and enjoy. Students are requested to stay on the paved trails to protect these fragile resources. Remember, it is not only harmful to the site but also illegal to deface or remove any plants, animals, rocks, or artifacts from the monument. "Take only pictures, leave only footprints."

Montezuma Well is a detached unit of Montezuma Castle National Monument located approximately 11 miles from the park. Take Exit 293 from Interstate 17 and drive four miles. No entrance fee is charged. There is a ½ mile loop trail that is not recommended for wheelchair use. A lush, shaded picnic area is also located at the well. This picnic area is adjacent to an environmental study area, and is especially appropriate for school group use.

#### Tuzigoot National Monument

Tuzigoot National Monument is located 50 miles south of Flagstaff, Arizona, via U.S. Alternate Highway 89A; or 90 miles north of Phoenix, via Interstate 17 and Highway 260 West.

The park is open daily, except Christmas Day. Winter hours: 8:00 a.m. to 5:00 p.m. Summer hours: 8:00 a.m. to 6:00 p.m.

Educational groups visiting the site may qualify for an entrance fee waiver (please refer to fee waiver information under Montezuma Castle). Junior ranger program activity guides are provided upon request. A school group orientation may be given by a park ranger; inquire at visitor center for availability.

The park visitor center is a small, oldstyle museum with a large number of artifacts on display. It is one of the few museums interpreting ancient Sinaguan culture in Arizona. The Ruins Trail, which is  $\frac{1}{4}$  mile in length, loops around the pueblo, allowing visitors to closely view the structures. An additional trail of  $\frac{1}{4}$  mile leads to Tavasci March, one of the few freshwater marshes found Arizona. Rangers are available to provide information and assistance.

The visitor center and the Tavasci Marsh Overlook Trail are handicapped accessible. Wheeled vehicles are not recommended on the Ruins Trail. The park trail guide is available in braille, and large print, and tape. These materials are available on request.

The walls of the Tuzigoot ruins are fragile. Climbing or sitting on the walls is prohibited. Students are encouraged to stay on the trail for their safety and for the protection of the cultural and natural resources.