

WUPATKI RUINS TRAIL

WUPATKI NATIONAL MONUMENT

15 CENTS IF YOU TAKE THIS BOOKLET HOME



South portion of Wupatki before excavation.

Wupatki National Monument is one of more than 230 areas administered by the National Park Service, U. S. Department of the Interior. These include such magnificent scenic areas as Grand Canyon and Yosemite National Parks, and other Parks and Monuments set aside for outstanding scenic, scientific, and historical values.

The National Park Service has the responsibility of preserving the Parks and Monuments in their natural, unspoiled condition and of making them available for your enjoyment in such manner as to leave them unimpaired for the enjoyment and inspiration of future generations. To achieve this high purpose such destructive activities as woodcutting, hunting, grazing, mining and even flower-picking are prohibited. We hope you will join with us in protecting Wupatki National Monument by taking only pictures and inspiration and leaving only footprints and good will.

The men in the uniform of the National Park Service are here to serve you and will welcome the opportunity to make your stay in Wupatki more enjoyable.

KEEP AMERICA BEAUTIFUL

INTRODUCTION

This pamphlet is intended to supplement the free leaflet which gives the general story of Wupatki National Monument. It might be useful to read that leaflet before going through the ruin itself. We would appreciate it if you would sign the register.

The trail will lead you around Wupatki Ruin. Numbered stakes on the trail correspond to numbered paragraphs in this pamphlet, which will help you understand the features you will see.

Spend as much time in the ruin as you like; all we ask is your cooperation in **keeping off the walls and not removing any pottery fragments, rocks, plants, or other material from the area. Thank you.**

WUPATKI RUINS TRAIL

1. Wupatki Ruin. From this point is an excellent view of the entire ruin, including the "amphitheater" and ballcourt. At its peak of occupation, during the 1100's, the village contained over 100 rooms with 250-300 inhabitants. It is the largest of more than 800 ruins within the boundaries of Wupatki National Monument, and was partially excavated

Wupatki Ruin with "amphitheater" in lower right.





Wupatki Ruin, after excavation and some restoration in the 1930's

in 1933-34 by the Museum of Northern Arizona, and the National Park Service in 1941-42 and 1952-53.

This dwelling was occupied from about A.D. 1120 to A. D. 1210 by the Sinagua (see-NAH-wah) Indians, and this region represents the northernmost limits of occupation by this prehistoric tribe. The Little Colorado River, seven miles east, roughly marks the boundary between this group and another prehistoric tribe to the north, the Anasazi (ah-nah-sah-zee). Other Sinagua lived to the south in the Verde Valley.

Above is a picture of Wupatki Ruin as it appeared after excavation and partial restoration under the CWA program in the 1930's. Since then the National Park Service has developed a policy to preserve rather than restore archeological structures. For this reason, the restored portions were removed. We believe the ruin as it appears today leaves one with a greater feeling of admiration for the prehistoric builders than it would with any added restoration.

2. Ephedra — "jointfir," or "Mormon tea" (*Ephedra viridis*).
A valuable browse plant for grazing animals in winter,

when better forage is lacking. A palatable tonic beverage can be made from the dried stems and flowers of the plant, and it was used by Indians and early white settlers in the treatment of certain diseases. Ephedrine is obtained from a Chinese species.

3. Moenkopi sandstone. Notice how this rock breaks down into good building stones. The banded layers of sandstone, developed as silt in an ancient shallow sea, split along horizontal planes, and for this reason it was easily quarried and used by the Indians in construction of their dwellings.

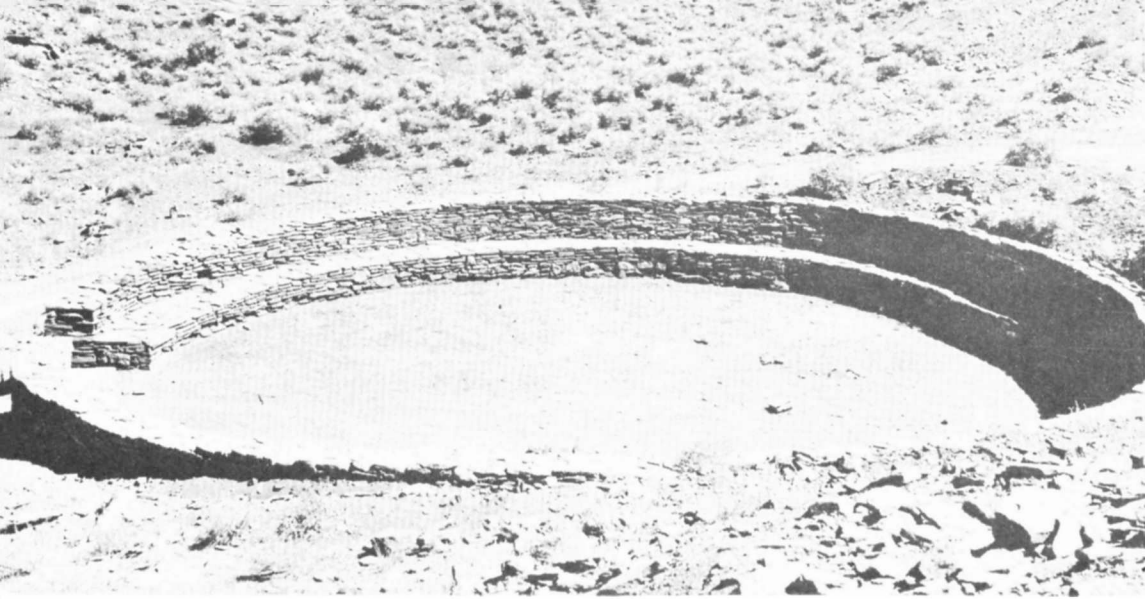
The gray material on the sandstone is a lichen (ly-ken) which produces an acid that assists in the breakdown of rock, the first step in producing soil.

4. Fourwing saltbush — chamiza" (*Atfiplex canescens*). One of the most common shrubs of the Southwest; adapted to diverse soils and climatic conditions, and is a valuable browse plant. Indians used to depend on the saltbushes as a source of meal which was made from the parched seeds, and like pinole (made from mesquite pods) it sometimes was mixed with water to make a beverage.

5. The ruin here is four stories high at its tallest point—two stories against the rock and two stories above. To the rear

Pole-supported wall before repair, above you at Stake 5.





The "amphitheater"

of the iron beam, necessary to support the upper walls, you can see one of the original timbers used in the construction of this dwelling.

Notice the small opening in the wall above the stone-lined trench. With the trench below, it was used to conduct air to the rooms in the interior of the structure. As the dwelling was extended toward you from the higher portions, the added outside rooms blocked air from the older ones, necessitating a series of vents to take fresh air into the interior rooms.

The small rooms you see were used for the storage of corn and beans, or other food products.

6. Here is a typical pueblo room with a small storage bin in the rear. The metate (meh-TAH-tay) and mano (mah-no) in the background were used by the Indians to grind corn. Often two or three metates with manos for each are found in one room. This does not mean the room was used for grinding purposes only. As is often the case today among Pueblo Indians, the three metates are all made from rocks with different degrees of coarseness. Coarse metates were used for preliminary grinding and fine-grained ones for final grinding.

In the center of the floor of this room is a small, rectangular, stone-lined firepit which was used for both heating and cooking.

7. Ventilator. The long stone-lined channel, as at Stake No. 5, was used as a ventilator, the opening being at floor level in the cliff wall to your right. The upright slab of stone at the end of the ventilator trench deflected the incoming air so that the draft would not pass directly across the firepit, which was usually situated in the center of the room or work area.

This means of ventilation was not generally used by the Sinagua Indians, having been adopted from the neighboring Anasazi, with whom they had very close contact in this area.

8. "Amphitheater." From this vantage point you are able to obtain a good view of the "amphitheater" or "dance plaza." This circular depression resembles in many ways the large ceremonial structures (kivas) of the neighboring Anasazi. There is no indication that it was ever roofed, and the ceremonial features normally found in a kiva are lacking. For this reason there is doubt as to the exact functions of this structure, the only example known in the Southwest.

In the foreground is a collapsed wall that fell intact.





Break in wall due to lack of bonding

9. Unexcavated room. This is the way the ruin looked prior to excavation. As you pass through this section of rubble notice how large sections of the walls fell intact, the individual stones still retaining their original relative positions. The walls were probably two stories high at this point.

Archeologists uncovered a quantity of material by carefully excavating into rubble such as this. The more fragile material that was on the floor, such as pottery, in most cases was crushed or scattered by falling rocks when the ceilings or walls collapsed. However, because the excavators saved all fragments of pottery resting on the floor, they were able to restore many of the broken vessels, some of which exhibit beautiful designs in black on a white background.

10. Step into this room. You will see bins used for storage on the upper right. The doorway to the rear is not prehistoric, the room having been remodeled and occupied by a shepherd about 1880.

11. Ball court. Looking down about 150 yards you will see an oval masonry ring. This is a ball court, one of several in

this area, the northernmost ones that have been discovered. In southern Arizona and all through Mexico and Central America ball courts are fairly common.

We know very little about the game that was played in this court. However, in Arizona sites two rubber balls have been found which are similar to those seen in use in the Mexican ball courts by the Spanish conquerers when they first entered Mexico. The game played here, if like those in Mexico, was part of religious ritual.

This ball court is unique among Arizona ball courts in being constructed of masonry. Others are generally made of adobe.

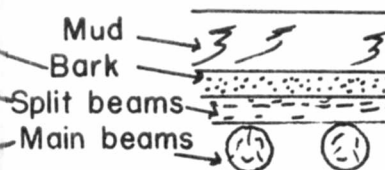
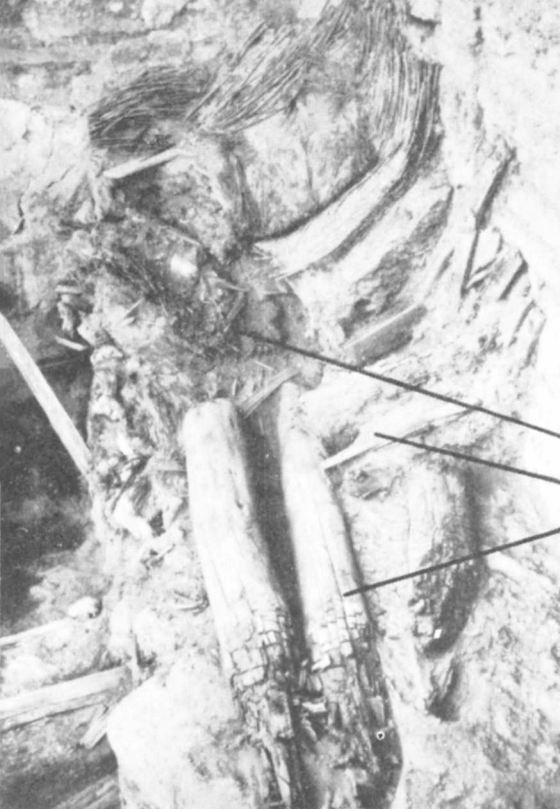
Take the marked trail to the ball court for a closer look if you wish.

12. In adding this room to the pueblo the builders joined their walls to ones already existing, as can be seen on your left. As a result of constructing rooms in this fashion the builders were unable to interlock the building stones of the new room to those of the old one. It was usually at these points that walls collapsed first, because they were not tied together well.

In this room seven infant burials were found in slab-lined pits (only one pit can be seen today). As with most people, the Indians held a close relationship to their children, probably believing, like the Hopi today, that the spirit of the

One of the seven infant burials mentioned at stake 12.





The roof as
built before
collapse

Collapsed roof.

dead child would be reborn in the next baby. Consequently the deceased were often buried in the mother's house.

13. Work area. The area in front of you was an outdoor workshop, or patio, where the people could grind corn, make pottery, mend clothes, gamble, or gossip. It was surrounded by a low "windbreak" wall and perhaps in the summer was partially covered by a brush "shade."

14. Room construction. Upon entering this room one can see how the original builders took advantage of the two natural rock walls. This eliminated construction of two sides of the room. The lower portion of the room was filled 5 feet deep with trash before the first floor was laid.

Original timbers are still in place above the opening in the rear wall. Holes for the beams that supported the second story are visible in the side walls. A considerable num-

ber of beams was recovered during the excavations at Wupatki, and the study of this material has contributed greatly to the tree-ring method of dating in the Southwestern region.

Most of these beams were of Ponderosa pine, not present nearby. It is possible the pine forest was closer to Wupatki then than now.

15. Trash deposit. The sloping ground all along this side of the ruin is the rubbish heap. It is from trash deposits such as these that archeologists are able to obtain a great deal of information about material developments and changes that occurred in the history of the people who lived in these villages.

Many interesting specimens have been recovered from the trash deposits and rooms of Wupatki, such as fragments of cloth woven in different patterns or colored with a blue dye, brightly painted baskets, ornaments of red siltstone and shell, small copper bells, parrot burials, and several macaw burials, to mention a few. Many of these items were traded in to this region from the south, some having come from Mexico, such as the macaws and copper bell.

The small modern building to your right on the next ridge is on the site of the spring that furnished water for Wupatki in prehistoric times, as it did until recently for the

Room with firepit with a deflector between it and ventilator in wall.



visitor center and houses here. It still provides water for wild animals.

16. Climb the ladder into this room, if you wish. The two beams at the rear of the room are original roof beams that have been in the ruin almost 800 years. Above the beams once lay the cross pieces that formed the next layer, on top of which was placed the mud or clay to complete the roof.

The bins below the beams were used for storage of farm products and other foods gathered from wild plants.

The T-shaped doorway through which you entered is quite common in Southwestern ruins. One probable purpose behind this shape was that in the winter a blanket, a skin, or a mat could be hung over the larger opening, leaving the lower, smaller one free to admit fresh air.

17. These three small rooms have been excavated. They were originally covered by a dirt roof at about the height of a man. The entrance to these rooms, as well as all other ground floor rooms in the pueblo, was through a hatchway in the roof, which also served as an escape for the smoke from the firepit.

In the end room is another example of a ventilator opening going through the wall, and a vertical slab (deflector) placed to keep the draft of fresh air from blowing firepit sparks around the room.

This is the last stop on the trail. On your way back to the visitor center, please return this booklet to the register stand, or, if you wish to take it home, please deposit 15 CENTS in the slot inside the stand.

GENERAL INFORMATION

Sunset Crater, 11 miles south of here, is the youngest of 400 volcanoes located in the Flagstaff region. It is one of the few prehistoric volcanoes in the world that we can accurately date, (another being Mt. Mazama, where now is Crater Lake, Oregon), and one of the few that had such a profound effect upon people living in the area. When it erupted it covered almost 800 square miles, including the

Wupatki area, with fine black volcanic ash. This eruption took place *before* the masonry pueblos in this region were built.

When the eruption was over, a few individuals probably returned to this area and found, to their surprise and pleasure, they were able to mature crops in locations where they hadn't been able to farm before. The thin layer of volcanic ash acted as a moisture-retaining mulch; the people could plant their seeds in the underlying soil and the cinder cover would hold enough moisture to insure them a good harvest.

When this word spread around, it created a great land rush, the only one we know of in the Southwest. Large numbers of Indians from all over this part of the Southwest swarmed into the region of the cinder fall to take advantage of the new farming land. The Hohokam came from the south, the Mogollon from the southeast and the Anasazi from the north.

The main concentration took place between A.D. 1100 and 1200, and during that time the area between the San Francisco Mountains and the Little Colorado River was inhabited by perhaps 8,000 Indians.

Citadel Ruin



The abandonment of the area is almost as interesting as the occupation. Tree-ring evidence indicates that from about A.D. 1215 to 1300 there was a long drought of varying intensity which culminated in the great drought of 1276-1299. Winds accompanying the drought turned the area into a dust bowl, moving away the moisture-retaining cover of cinders that the people had depended upon for their farming. Depopulation set in as farming acreage decreased.

The Anasazi element apparently moved north or east into the Tsegi Canyon or Hopi country, while the Sinagua moved south into the Verde Valley and east to the Chavez Pass region near Winslow. By the mid 1200's Wupatki probably was completely abandoned.

When the Spanish came through this general region between 1583 and 1605, they encountered small bands of Indians in the San Francisco Mountains near Flagstaff. These probably were hunting and gathering parties of either Havasupais from the Grand Canyon or Yavapais from the Verde Valley. No Indians were reported between the Hopi villages and the San Francisco Mountains. The Navajo, who are seen in the monument today, did not move into the general Wupatki region until about 1870.

Other ruins in the monument that are less accessible are

Wukoki Ruin





Lomaki Ruin

Wukoki, a three-story pueblo built on a large outcrop of sandstone, Lomaki, and Citadel Ruin.

ADDITIONAL POINTS OF INTEREST

This region is one of the most interesting archeological and scenic localities in the United States. Sunset Crater National Monument is 18 miles to the south of Wupatki National Monument, and was the source of the black volcanic ash which had such profound effect on the prehistoric farmers. Twenty-one miles farther to the south is Walnut Canyon National Monument, a beautiful canyon and rim setting for hundreds of ruined homes of prehistoric Indians who also were influenced by Sunset Crater's ash. Farther to the south, in the Verde Valley, noted as Great Drought refugee areas, are Tuzigoot and Montezuma Castle National Monuments (the latter including Montezuma Well.)

CONSERVATION—YOU CAN HELP

If you are interested in the work of the National Park Service and in the cause of conservation in general, you can give active expression of this interest, and lend support by alining yourself with one of the numerous conservation organizations which act as spokesmen for those who wish our scenic heritage to be kept unimpaired for the enjoyment of future generations.

Names and addresses of conservation organizations may be obtained from the ranger.

**This booklet is published in cooperation with the National Park Service
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