

SUNSET

CRATER

NATIONAL MONUMENT, ARIZONA

Sunset Crater has the grace and glow of a
lasting sunset. But it was not always so serene.

Nine hundred years ago it erupted . . .
viciously and violently.

It horrified the people and frightened them

away. But in its fury, it was kind . . . it
spread upon the earth an ash that enriched
the soil.

The people came back . . . at first timidly . . .
then in a rush.

They lived comfortably here for two centuries,
until the very winds that spread the "magic"
ash stripped it from the soil.

And then the people left . . . forever.

Sunset Crater backdrops a huge black cinder dune and a craggy lava flow which look as if they have barely cooled since the eruption. Only the thick growth of yellow pine show that centuries have passed in which the vegetation-stripped earth has replenished itself.

In A.D. 1065, the few Indians living at and near what is now Sunset Crater National Monument were startled by the outbreak of a volcanic eruption. As volcanic ash clouded the sky, and as cinders rained down upon their homes and farms, they hurried away. When the eruption ceased, a new cinder cone 1,000 feet high had appeared. Jagged lava flows lay at its base. Black volcanic ash covered hundreds of square miles surrounding the cone.

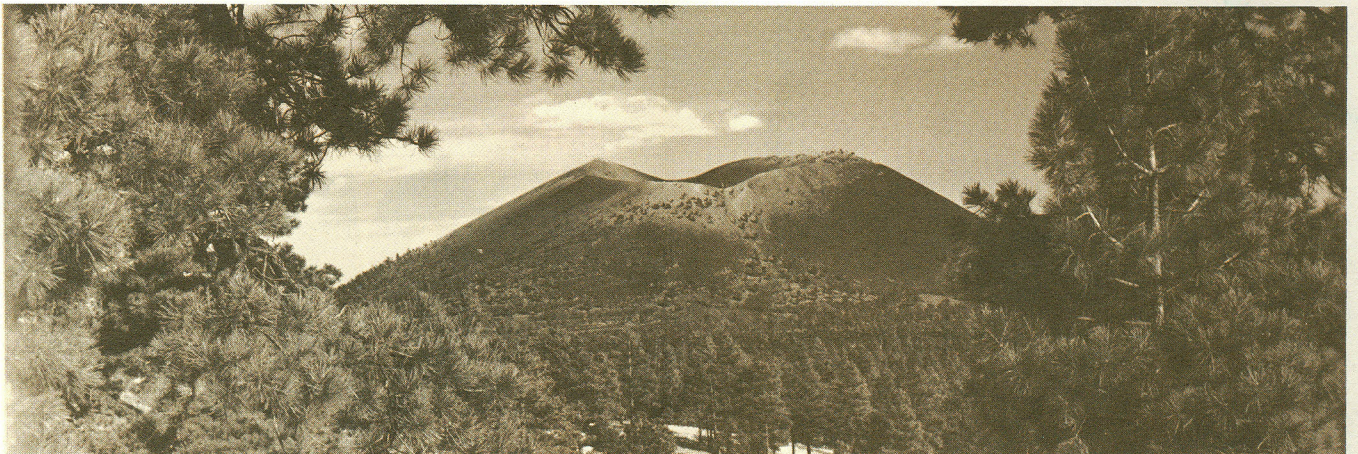
This volcanic ash, acting as a mulch, transformed the soil into excellent farmland. And this, in turn, drew the farming Indians back into the area.

The ruins of the post-eruptive culture are now preserved in Wupatki National Monument. The remains of the volcano—the cinder cone and lava beds—are now Sunset Crater National Monument.

What Happened to the Land

Prominent in north-central Arizona are the San Francisco Peaks and the surrounding related volcanic field. Together they cover some 3,000 square miles. The area is studded with volcanic peaks, cinder cones, and lava flows that represent a long period of volcanic activity. Geologists find evidence that here, during the last two million years, a series of outbursts was separated by long periods of inactivity. Some of these eruptions consisted of quiet outpourings of molten lava, and others were violent.

About 900 years ago the last of these eruptions occurred. This explosive outbreak produced the symmetrical cinder cone and rough black lava and cinder area of Sunset Crater. Amid a roaring and trembling earth, fiery globs of molten lava, cinders, and fine particles of ash were blown from a





The red sandstone of Wupatki Ruin stands out against black lava-capped mesas. The ancient amphitheater is in the foreground.

volcanic vent high into the air. Larger and heavier objects fell back around the vent; lighter materials were carried out by the wind. Higher and higher grew the mass of smoking black rocks and cinders. Ejected stones rolled down the steep slopes, enlarging the base of the growing cone. Prevailing southwesterly winds caused more of the ejected material to fall on the northeast side, building that part of the cone higher.

Following this period of activity, the eruption slackened, as explosive outbreaks were interspersed with outpourings of molten lava from vents near the base of the cinder cone. Amid steaming spatter cones and crusted lava lagoons, the smoking cone towered above a blackened land. Thus Sunset Crater, youngest member of the San Francisco Peaks Volcanic Field, had been created.

For years, gradually lessening activity continued, as hot springs and vapors seeped out from fumaroles about the vent. These vapors deposited minerals around the crater rim and stained the cinders. Today the summit seems to glow with the hues of a perpetual sunset.

What Happened to the People

About A.D. 600, a few farming Indians moved into the area near the San Francisco Peaks. These Indians lived in pithouses, which were very efficient dwellings that kept out the summer's heat and winter's cold. Not many could live here, however. Because of the lack of moisture in the soil, only the few very best areas could be used for growing crops. We know some people were living here at the beginning of the eruption, for their homes have been excavated from the cinders and ash. In fact, timbers from the houses have helped to furnish evidence for dating this event.

The volcanic eruption greatly affected the lives of the people. It forced those living nearby to flee. But it also spread fine volcanic ash over an area of about 800 square miles. The porous layer formed an excellent mulch that trapped moisture in the soil and turned a seeming catastrophe into a blessing. Indians who had previously farmed around older cinder cones moved into the new ash area. Word of this productive farmland spread to neighboring regions, and families came from all directions.

The area became a melting pot of cultures. The Pueblo dry farmer from eastern and northern Arizona mingled with the Hohokam irrigation farmer from southern Arizona. Influences from the Mogollon groups to the south and east and the Cohonino groups to the west have also been discovered here. This is the only place where evidence of such mingling has been found.

Each tribe came with corn seed and digging sticks to cultivate the cinder soils. As the tribes lived together, the differences between them became less and less apparent.

The people developed villages throughout the cinder-covered area. One of the most important and longest inhabited is now called Wupatki, a Hopi word for "tall house." Its location and size were probably determined by the presence of a spring, one of the few in this arid region. From an insignificant pueblo of a few rooms,

Wupatki grew to the largest in the region. During the 1100's, it contained more than 100 rooms. In places it stood at least 3 stories high, and perhaps as many as 150 persons lived within its walls.

To one side of the Wupatki Ruin, protected from the prevailing winds, was an open-air amphitheater possibly used for public ceremonies. In the valley below was a ball court of stone masonry, one of two found in the vicinity. Little is known of the game that was played there. Remains of ball courts found in southern Arizona have been dated to the period before A.D 1150, and the idea was probably brought to Wupatki by migrants from that region.

During the early 1200's, people started leaving the area. Winds stripped the soil of volcanic ash, and in 1215 a severe drought began. By 1225, no one remained at Wupatki.

Wind-swept Lomaki Ruin is perched upon the edge of a jagged earth crack.



The Monuments Today

Aside from the trees and other plants that have gained a foothold amid the cinders and lava, Sunset Crater appears much as it did just after the eruption. Remains of the hot springs, spatter cones, and other evidences of volcanism look as if they barely have cooled. Black cinder dunes, large cinder fields, and the twisted, jagged "slag heaps" of the lava flows lend an atmosphere of strangeness.

A small lava cave, near the foot of the cone, contains ice the year around. Since removal of any of the ice would raise the temperature of the cave in summer and cause the remaining ice to melt, visitors are asked not to remove any of it. Future visitors, too, would like to see the ice.

An easy trail will take you across some of the lava flow, past the lava cave and other intriguing places. The Lava Flow Nature Trail guidebook, available at the register stand, is keyed to numbers posted along the trail.

Wupatki National Monument contains approximately 800 Indian ruins. Wupatki pueblo ruin itself is one of the most impressive in northern Arizona. Its walls rise from a sandstone spur at the base of a black lava mesa that overlooks the Painted Desert. The ball court and amphitheater are below the ruin.

Around Citadel Ruin was another concentration of prehistoric Indians. Within 1 square mile there are more than 100 sites, from small earth lodges to large pueblos. The Citadel itself, as yet unexcavated, was a fortified apartment house—probably 1 or 2 stories high and containing about 50 rooms. Just below it is the small pueblo ruin now called Nalakihi, a Hopi word for "house standing alone."

Other outstanding sites in the monument are Lomaki and Wukoki Ruins and several fortified pueblos.

There are self-guiding trails to Citadel-Nalakihi Ruins and to Wupatki Ruin. Guidebooks keyed to numbers along the trails are available at the beginning of each.

The paved entrance roads to both monuments lead eastward from U.S. 89. The Sunset Crater road is 15 miles north of Flagstaff, and the Wupatki road is 15 miles farther north. Thus it is possible to reach both monuments on paved roads by driving into each from U.S. 89. The two monuments, however, are connected by a paved road that will take you across 18 miles of cinder-covered hills, along the edge of the Painted Desert, and through several unusual plant and animal communities. You should stay strictly on the road, for driving on the cinders is dangerous.

Uniformed personnel are on duty the year around at Wupatki and Sunset Crater. Roads into Sunset Crater may be closed by snow for short periods in winter. The visitor center at Wupatki are 14 miles from U.S. 89.

Overnight facilities are not available at either monument. There is drinking water at headquarters of both areas.

Please Help Preserve These Areas

No fires are allowed. Please be careful in disposing of cigarettes and matches.

Do not walk on prehistoric walls. This rule is designed for your own safety as well as to preserve the ruins.

All plants, animals, and geological and archeological features are protected by law. Please do not disturb any of them.

If you have a pet, you must keep it in your car or on a leash while you are in the monuments.

Administration

Wupatki National Monument, containing 56 square miles, was established on December 9, 1924. Sunset Crater National Monument, containing 4½ square miles, was established on May 26, 1930. Elevation at Wupatki headquarters is 4,900 feet; at Sunset Crater, it is 7,000 feet.

Wupatki and Sunset Crater National Monuments are administered by the National Park Service, U.S. Department of the Interior. A superintendent, whose address is Wupatki National Monument, Tuba Star Route, Flagstaff, Ariz. 86001, is in immediate charge of both.

The National Park System, of which these areas are units, is dedicated to conserving the scenic, scientific, and historic heritage of the United States for the benefit and inspiration of the people.

THE DEPARTMENT OF THE INTERIOR—the Nation's principal natural resource agency—has a special obligation to assure that our expendable resources are conserved, that our renewable resources are managed to produce optimum benefits, and that all resources contribute to the progress and prosperity of the United States, now and in the future.



U.S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

TO CAMERON AND GRAND CANYON

WUPATKI (Woo-pot-key) NATIONAL MONUMENT

LITTLE
COLORADO
RIVER

5 MILES
NALAKIHU
(Nah-láh-key-hoo)
INFORMATION &
CITADEL RUIN

1 MI.
LOMAKI, RUIN
(Low-má-key)

9 MILES

WUPATKI
RUIN

2 MI.

3 MI.
WUKOKI RUIN
(Woo-kó-key)

MONUMENT
HEADQUARTERS
Visitor Center

A R I Z O N A

89

SUNSET CRATER NATIONAL MONUMENT

LOOP ROAD, 14 MILES

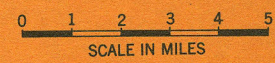
2 MI.
MONUMENT
HEADQUARTERS
Visitor Center

2 MI.
INFORMATION

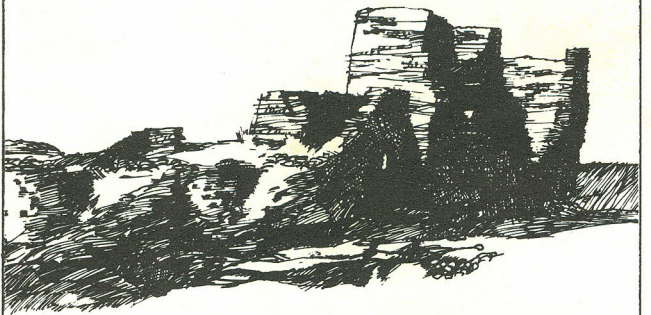
2 MI.
THE
CRATER

LAVA FLOW TRAIL

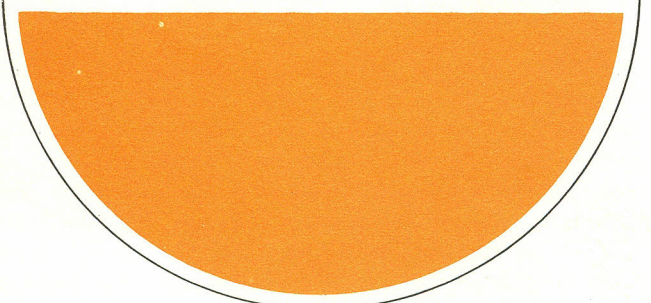
- SURFACED ROAD
- DIRT ROAD
- SELF-GUIDING TRAIL



TO FLAGSTAFF



WUPATKI



NATIONAL MONUMENT, ARIZONA