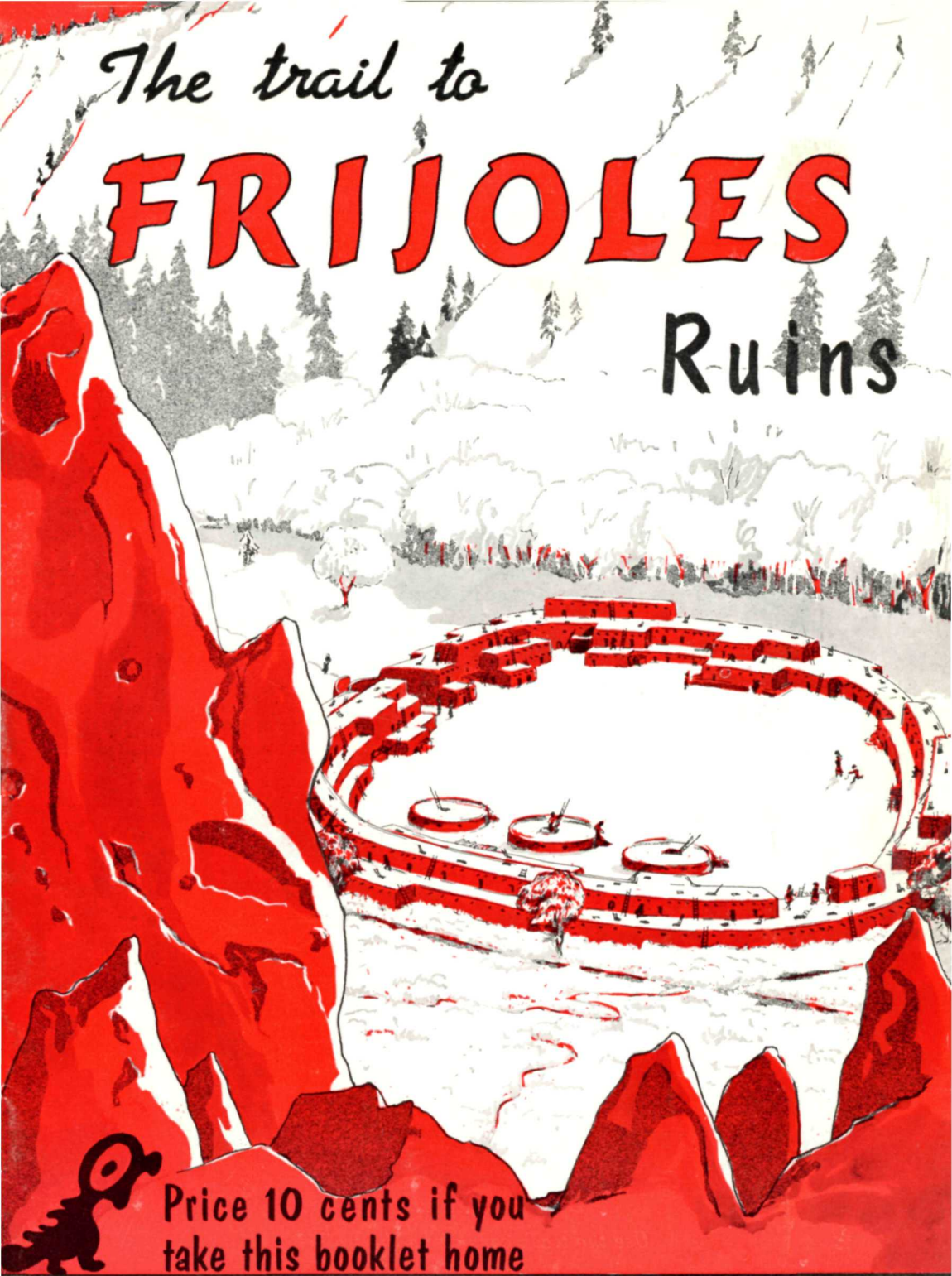


The trail to

FRIJIOLES

Ruins



Price 10 cents if you
take this booklet home

BANDELIER NATIONAL MONUMENT

46 MILES NORTHWEST FROM SANTA FE, NEW MEXICO

BANDELIER NATIONAL MONUMENT

Bandelier National Monument, one of 180 acres administered by the National Park Service, United States Department of the Interior, was set aside for its historic, scientific and scenic values. It contains Frijoles (free-HOH-les) and other canyons, the last canyon homes ever occupied by a Pueblo people who lived after 1600 in broad river valleys or on mesas. This area belongs to you and is part of your heritage as an American citizen. The men in uniform of the National Park Service are here to serve you and welcome the opportunity to make your stay more enjoyable.

The monument was named in honor of Adolph F. Bandelier, a Swiss-American historian and anthropologist who spent several years in the Southwest in the 1880's doing some of the earliest scientific work on both prehistoric and modern-day pueblos. His book, *The Delight Makers*, is a novel set in prehistoric times which attempts to reconstruct the life of the Indians who at one time inhabited Frijoles Canyon.

CONSERVATION — CAN A LAYMAN 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 aligning 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.

Don't be a litterbug.

Use the trash cans along the trail.

HOW TO USE THIS BOOKLET

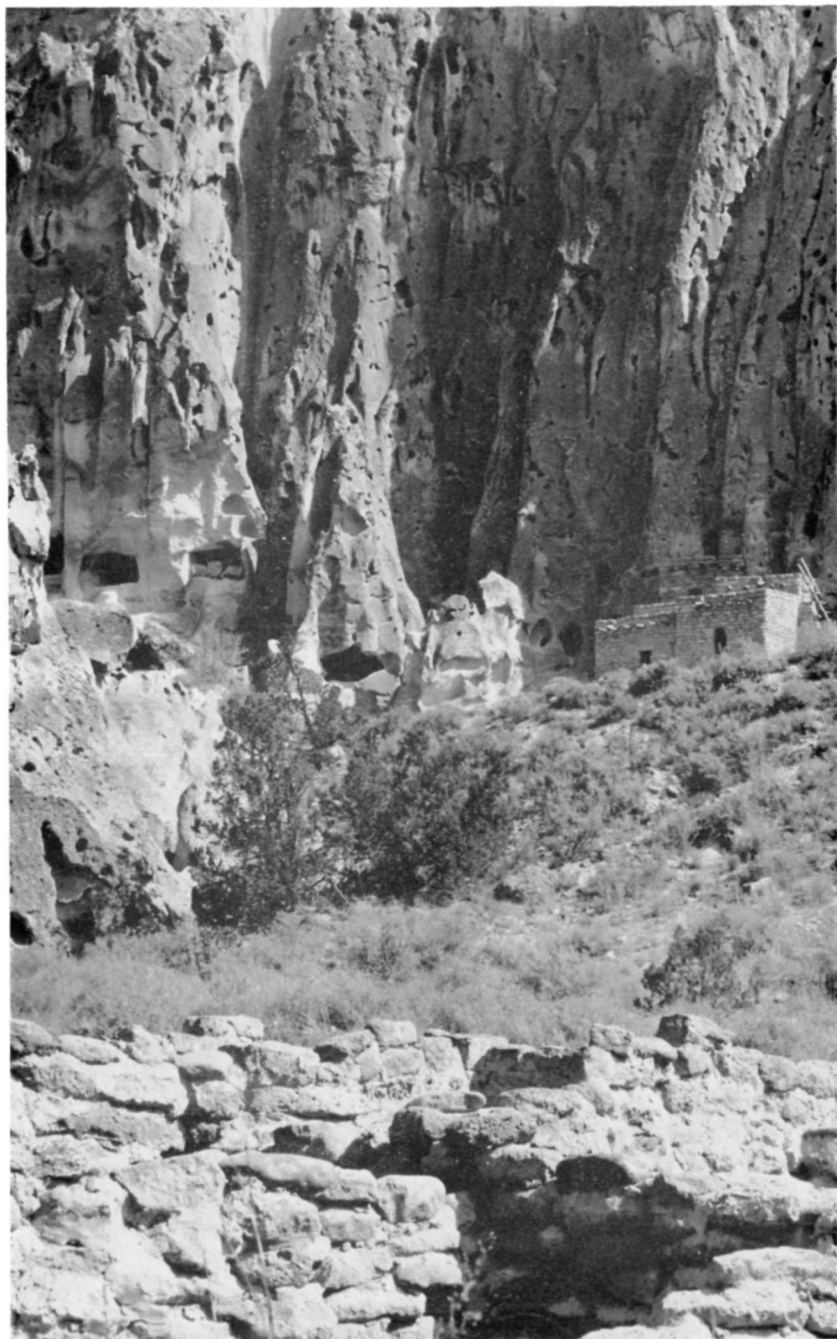
Numbered markers along the trail refer to the numbered paragraphs on the following pages which describe features at each of these points. Please stay on the trail and keep off walls in the ruins.

FRIJOLES CANYON RUINS TRAIL

1. VIEW OF THE CLIFFS. Along the base of the cliffs you will see many of the Indian dwellings that have been carved out of the soft rock. Some of the oval-shaped holes were doorways leading into rooms, while in other places only part of a room was cut into the cliff, the front then being completed with masonry walls. Many of the dwellings extended out from the cliff two or three rooms and were two or three stories high. The small holes bored in straight lines were socket holes for roof beams. Dwellings were built in this manner for nearly two miles along the north side of the canyon. Probably, some of the cave rooms were the first dwellings used in this area. As the population increased, the Indians constructed the larger buildings which you will presently see.

2. GEOLOGY OF FRIJOLES CANYON. More than a million years ago, the plateau upon which the monument is located was created through the successive eruptions of a huge volcano, the remnant of which today forms the Jemez (haymez) Mountains, 15 miles to the west. Great quantities of lava and volcanic ash were ejected to form a gradual slope reaching to the Rio Grande. The thick deposits of ash welded together as it cooled to form the soft tuff of which the canyons are composed.

A shredded cigarette butt is safe.



Cliff and cave rooms.

3. EARLY AGRICULTURE. This is the widest part of the canyon and was used heavily for agriculture. The Indians here were primarily farmers. They grew crops of corn, beans, and squash on the canyon floor and on the mesa tops. Farming was supplemented by hunting deer, wild turkeys and mountain sheep. The feathers of the turkeys were used not only on arrow-shafts but in costumes for ceremonials, and whole blankets were woven with split feathers wrapped around a yucca cord base.

4. BIG KIVA. This round, underground structure is called a "kiva." Originally this was a fully roofed room, built primarily for religious ceremonies. It was probably used, as are the kivas in the Rio Grande pueblos today, as a combination temple, school, and council place for the discussion of matters affecting the welfare of the pueblo.

The opening in the circle of rocks on the left (east) side of the kiva is a ventilator shaft; directly opposite it is an entrance. Another entrance probably existed through a hole in the roof, served by a ladder.

Most of the stone work here is original, but the wooden ends of the main roof beams and the butts of the six posts which supported the roof are restorations, placed in the original locations.

5. UNEXCAVATED RUINS. The mound on the left is an unexcavated ruin that will give you some idea of the appearance of pueblo buildings prior to excavation. Two rooms have been partially cleared in the center; a total of 30 to 40 rooms is estimated for the entire building, which is being reserved for future scientific study. Take a good look at this mound and then make a comparison of it with Tyuonyi, the ruin at the next station. Before excavation, Tyuonyi was a large circular mound similar to this one.

6. ENTRANCE TO TYUONYI. This is the only entrance on ground level to the excavated ruin of Tyuonyi, a name which means in the language of the San Ildefonso Indians "the meeting place" or "the place of treaty." The name and also the fact that the single entrance is narrow indicate ancient strife and some need for defense.

The walls at this opening are believed to have been approximately six to eight feet high. Posts were set at intervals along the passageway so that entering visitors were forced to follow a zigzag course; such an arrangement would seem to have been a defensive device.

7. TYUONYI. Tyuonyi was once a large pueblo or apartment house of about 400 rooms. It was one to three stories high in different portions, and there may have been as many as 500 persons living here at one time.

Most of the rooms are small, but, lacking furniture and modern facilities, the living space was adequate for these people. Many of the interior rooms were no doubt used for storage rather than for living. Ceremonial dances and everyday work could have been carried out in the central plaza. (You will find a reconstructed model of this ruin in the museum.)

The walls that you see standing today are just about the same height that they were when the ruin was excavated. The National Park Service carries on a continual process called stabilization, which is not an actual rebuilding of the walls but is merely an attempt to prevent further deterioration. This work involves replacing the original mud or adobe in the upper sections of the walls with cement; the rocks are lifted, the mud removed and cement placed, then the rocks are put back in their former place. If you will look at the lower sections of some of the higher walls, you will see the original mud still in place.

Take nothing but pictures; leave nothing but footprints.

(5)



Tyuonyi Ruin during early stages of excavation.

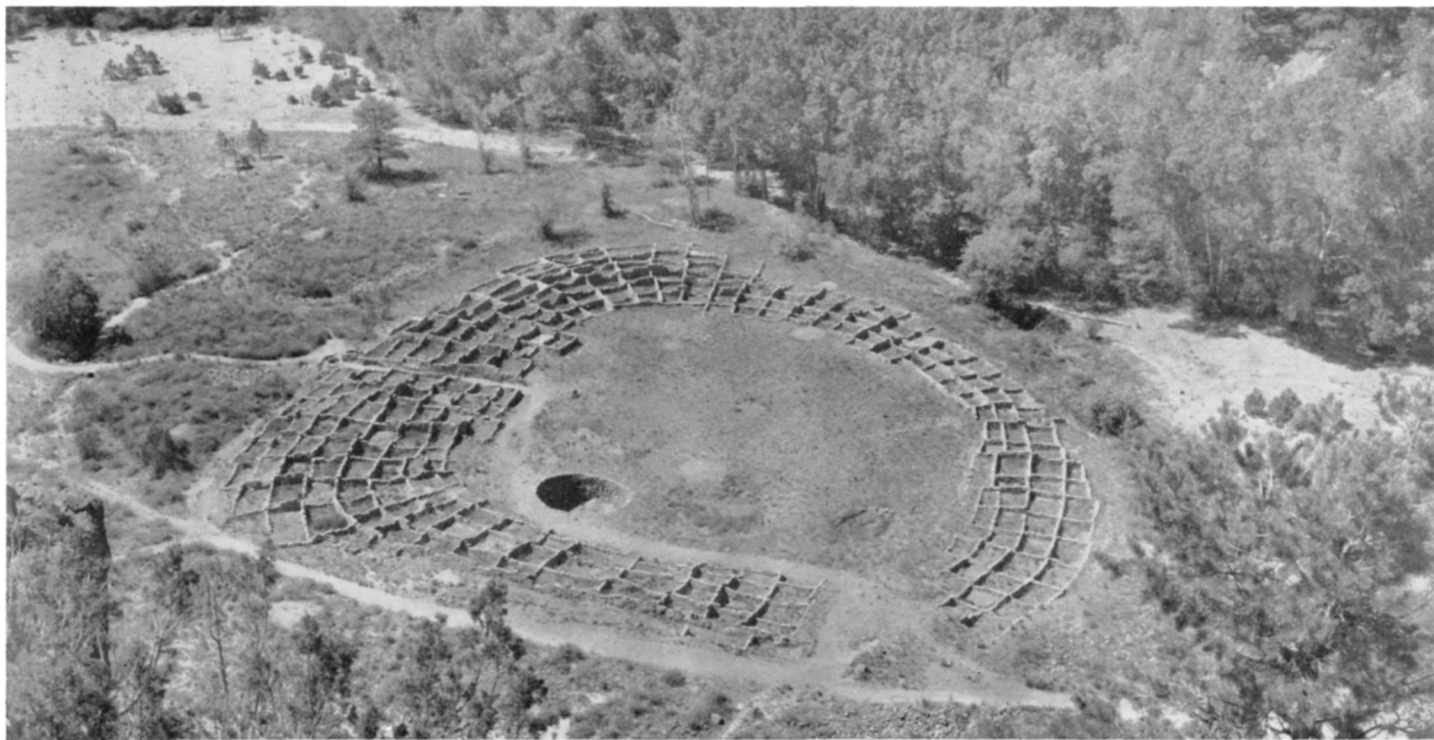
8. KIVAS. The excavated kiva here and the two unexcavated ones just beyond are typical of the kivas generally found with these ruins. They were small, quite simple in construction, and were probably used by clans or societies. The only entrance here would have been down a ladder through a hole in the roof. Notice the ventilator shaft, at the east side (as is almost invariably the case). These ventilators were necessary to create a draft to remove the fire smoke, which would rise through the ladder hole in the roof.

9. EARLIEST PART OF TYUONYI. The section of the pueblo to the right of this stake was the first part that was built, judging from the earlier pottery types found in these rooms during excavation. The main occupation of the site ran from about 1300 A.D. or somewhat before up into the beginning of the historic period. The section on which you are standing is the only part of the ruin which remains unexcavated.

The trail branches here. If you prefer to end your walk here, you may return to the Museum by turning left for a short distance and following the signs back to the Visitor Center — or you may continue along this same trail to Long House. The trail up along the cliffs (the one to your right) involves moderate climbing. For your safety, stay on the trails.

10. NATURAL CAVE. About halfway up the cliff behind this stake is a natural cave, which was used by the Indians. It was reached by a hand-and-toe trail, the remains of which may be seen up the edge of the vertical crack.

(7)



View of Tyuonyi Ruin from the cliff above.

If you will look at the section of the cliff base just a few feet to the right of the hand-and-toe trail you will see some grooves worn into the cliff. These were worn in during the process of sharpening stone axes.

The holes which are irregular in size and shape in the face of the cliff were caused by weathering and erosion. Only the caves along the base of the cliff were carved out by the Indians.

*If you should unthinkingly scratch your name
These walls will never look the same.*

II. CAVE ROOM. Here you may see some of the cave rooms hewn out of the solid rock of the cliff. The black on the ceilings is caused by smoke from the fires that were built in the rooms for cooking, warmth, and light. You will also notice how the cliff has been cut away for lower masonry rooms and smoothed out for the back of upper rooms that were built in front of the cave rooms.



*A restored dwelling of the type
once common here.*

Just beyond this point is a house reconstructed by the Museum of New Mexico in 1920 which gives you a better idea of how these cliff dwellings were built. If you can imagine houses such as these built almost continuously along the base of the cliff for about two miles, many of them three and four stories high, then you will have a good conception of the extent of this community. It is estimated that between 1000 and 2000 people lived here in the canyon at the height of its occupation.

12. SNAKE KIVA. This kiva is one of 13 kivas that were built at various locations along the cliffs; of interest here is the pictograph of the Feathered Serpent on the back wall in black. The Feathered Serpent motif is a fairly common design found in and around ruins of the Southwest and Mexico. It was used as a decoration on pottery as well as on walls.

The floor in this kiva is a blood floor formed by mixing animal blood with clay to give it the black color; this mixture made a harder floor than the ordinary water-clay mix. This is one of the few floors of this type known in the Southwest.

As in most rooms, the walls are plastered to a height of about three feet from the floor. There are several successive layers of plaster in some rooms. This presumably was done to keep the wall clean of soot, and to smooth the wall for better comfort when leaning back against it.

13. TOP OF THE TRAIL. You may enter some of the cave rooms here if you care to. Please do not touch the walls since the plaster is fragile.

Help preserve these ruins.

If you will look just to the right above the small pine tree that is growing out of the cliff about halfway up, you will see petroglyphs of a three-legged animal, a snake, and a turkey. Varying light conditions often make parts of these hard to see, but you should be able to make out some of them.

Please be careful while going down the steps from here; they are narrow and rather steep.

14. CAVE KIVA. This is the largest of the cave kivas; it has been partly restored; the floor and the front were reconstructed in 1912. Inside you will see poles fastened in the ceiling; these were the upper supports for vertical looms on which the Indian men did their weaving. The row of holes in the floor was for fastening down a number of small loops of fiber to which the lower members of the loom were lashed. (These loom fittings are not the original ones.)

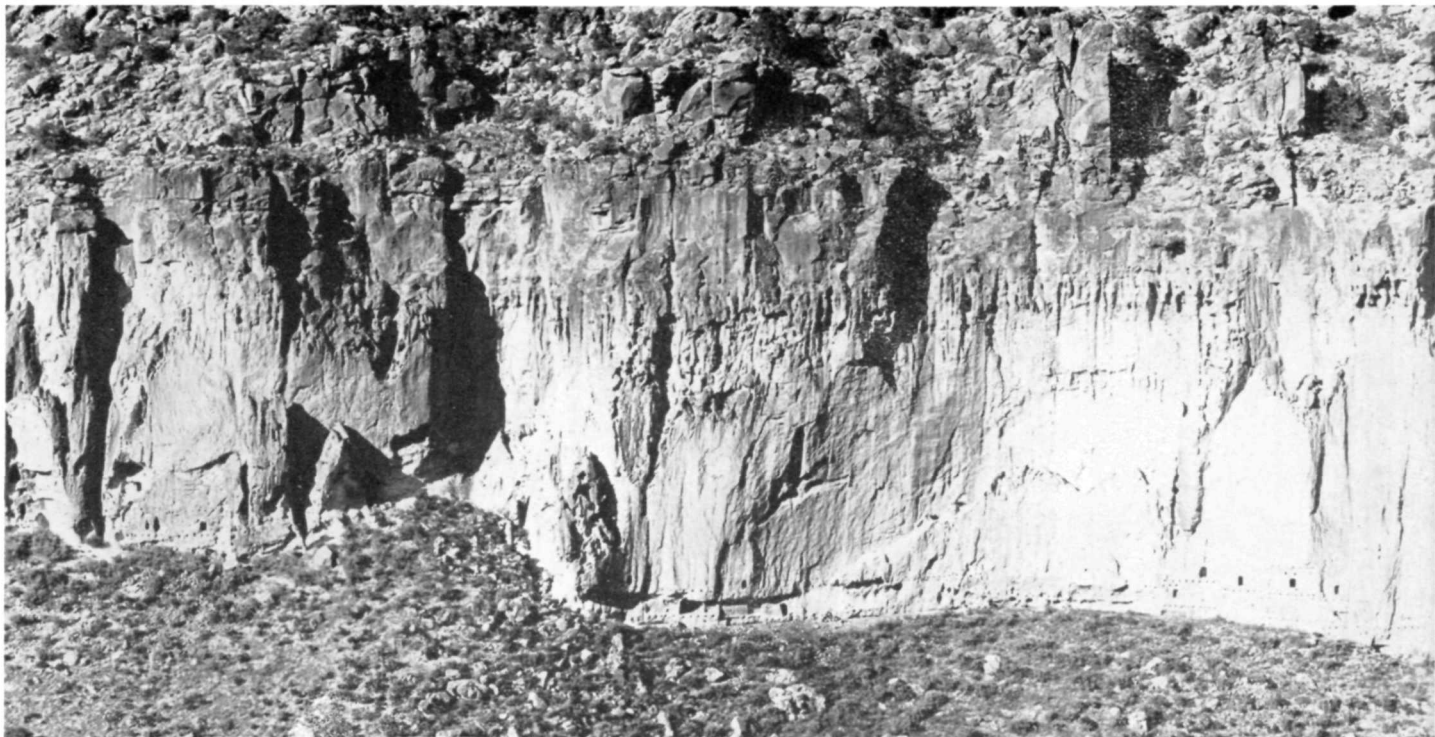
Inasmuch as more of these looms are found in kivas than are found in dwellings, it would seem that the weaving was done by the men for the most part; entry of women to the kivas was probably limited in the old days, as is still the case nowadays.

In the back part of the room there is a small hole in the floor called a "sipapu." According to Pueblo mythology, their ancestors came up to this world from four worlds below; the sipapu is a symbol of the original passageway. The pit in the floor between the doorway and the window was the fireplace. The smoke rose through the vents above the window and doorway. The niches on either side of the kiva were probably used for storage.

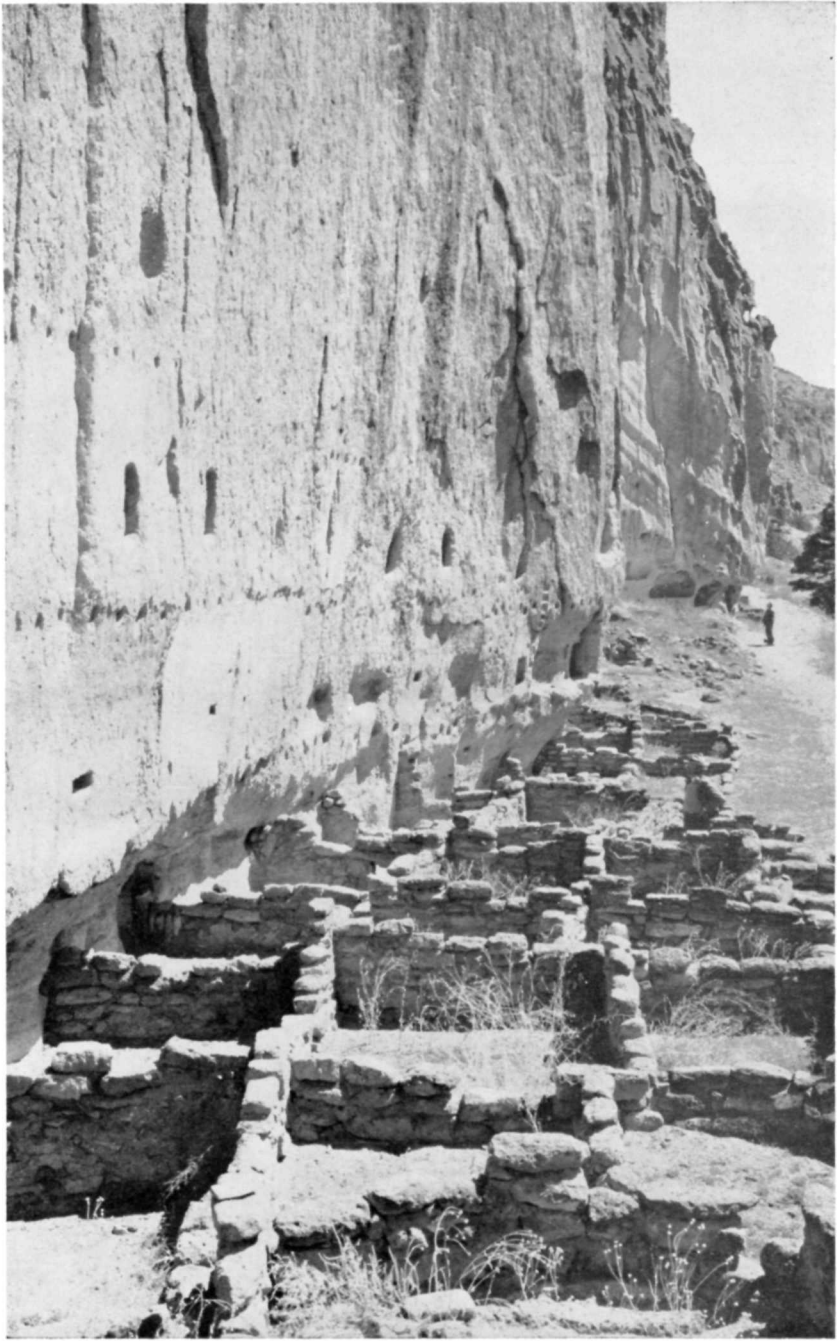
15. FORK IN TRAIL. If you want to return to the parking area, turn left. The trail ahead leads to the Long House section of the cliffs. It will take approximately 20 minutes more to visit this ruin.

16. ORCHARD. The fruit trees here and the irrigation system date from the early nineteen hundreds, when Judge Abbott of Santa Fe took up homestead rights in the canyon and developed a farm and summer resort. Ownership changed to Mr. and Mrs. George Frey in 1925; their Frijoles Canyon Ranch became a popular tourist stop. Near here a number of buildings used to stand, and the trail which was the only access to the canyon came down the cliffs at this point. The road into the canyon floor was not built until 1934.

(11)



A portion of Long House ruin along the base of the cliffs.



Long House, once a dwelling of over 300 rooms.

17. LONG HOUSE. This cliff dwelling had about 375 rooms and probably represents the best construction in this canyon. Notice the many rows of small “viga” holes to receive and support the ends of the roof beams. Two-thirds of this ruin has been excavated.

Note the faces that have been carved on the cliff above the top row of viga holes.

18. PETROGLYPHS. Petroglyphs are figures that have been cut into the rock, as distinguished from the painted designs, which are called pictographs. At this point there are numerous petroglyphs on the cliff that represent humans, birds, animals, sun and lightning symbols.

19. PICTOGRAPH. The pictograph seen here is a design often used by modern Indians in their pottery, jewelry, and rugs. The red color is a mineral paint made by grinding a soft red stone (hematite or red ochre) into a fine powder and mixing it with clay and water. Notice how this painting has been set in about four inches into the rock, so that it virtually has a frame around it.

Please leave the flowers for others to enjoy.

This is the end of the self-guiding trail, but if you care to go on to Ceremonial Cave, continue half a mile farther up the canyon. Follow either of the trails upstream to the third bridge across the stream, beyond which you will find the trail to the cave. A series of four ladders must be climbed to reach Ceremonial Cave; therein is a restored kiva and remnants of a number of rooms under the overhang.

HELP PREVENT FOREST FIRES

We hope that you have enjoyed this tour of the ruins. Visiting the museum at the Visitor Center will give you additional information on the Indians of Frijoles Canyon. There are two other self-guiding trails on the monument. Inquire at the Visitor Center.

IF YOU HAVE ANY QUESTIONS — ASK A RANGER!

This booklet is yours if you wish to keep it, for the payment of 10 cents. If you do not wish to keep the booklet, please leave it for another to use.



Portion of modern San Ildefonso pueblo.

THE INDIANS

The ruins in Frijoles Canyon and the surrounding area are protected in order to preserve one link in the known 2000-year span of the history of the Pueblo Indians.

The story begins about 2000 years ago in the Four Corners country where the boundaries of Arizona, Utah, Colorado, and New Mexico meet. At that time there were people living in that region whom archeologists call the Basket Makers. These people knew nothing of making pottery, lived in roofed-over holes in the ground called pit houses, and were just beginning to depend on farming for a living.

By about 600 A.D. these people had learned the techniques of pottery making and by 700 A.D. had begun to build houses on top of the ground. Agriculture assumed a more important place in their economy; more dependence was placed on the annual corn crop. From the semi-nomadic existence of the Basket Maker, a more stable and sedentary life emerged. Thus, we have the Pueblo civilization developing.

The people known as the Pueblo Indians have gone through several stages of development in architecture and in arts and crafts. Five general periods of Pueblo culture are recognized. During the first three periods they advanced along the road to a higher form of civilization. Working without metals of any sort, without any domesticated animals, other than the dog and turkey, and without the concept of the wheel, these people made startling progress in architecture and in their arts and crafts. The third period, which is called Pueblo III, was the high point in this prehistoric culture. The remains of this period, also called the Great Pueblo or Classic Period, are best exemplified in the spectacular cliff cities of Mesa Verde National Park, in the large pueblos in Chaco Canyon National Monument, and in the ruins of northeastern Arizona.

These three great centers of prehistoric people were all located away from major streams, in areas of small, presumably year-round creeks, such as the one here in Frijoles Canyon. This situation was to spell disaster for the great

towns. Scientists working with tree-rings have determined that for a period of 24 years, from 1276 A.D. to 1299 A.D., there was an extreme drought throughout most of the Southwest. Outlying centers of this agricultural population were apparently broken up by this drought.

During the Pueblo IV period that followed, between 1300 and 1600 A.D., the Pueblo people concentrated for the most part in those areas where occupation continued into historic times. This is the period during which the Indians came to, lived in, and abandoned Frijoles Canyon. They were the last of the Pueblo Indians to live in a canyon home, a locale so often selected by these people prior to 1300 A.D. In the Pueblo V period of historic times, the Pueblo Indians selected open valleys and mesa tops as sites for their homes.

Why did they later abandon Frijoles Canyon? Any number of possible explanations can be offered. Certain towns to the north were burned, suggesting warfare, as does the entry way into the ruin of Tyuonyi, which you have seen. We do know that in the second half of the sixteenth century, during the period when Frijoles Canyon was abandoned, there was a severe drought in the Rio Grande area. Since water supplies are precarious even in relatively moist years throughout this region, the drought explanation seems the most logical. At any rate, by about 1580 the majority of the Indians had left this canyon.

Where did they go? In general, archeologists believe that they settled along the Rio Grande. The people living in the present-day pueblo of Cochiti, about 17 miles southeast of here, and the people living at San Ildefonso Pueblo, both claim Frijoles Canyon as an ancestral home. Perhaps descendants of the early inhabitants of this canyon live today in these two modern pueblos.

If you are interested to read more about the early Indian inhabitants of the Southwest, examine the selection of publications available at the Visitor Center. Proceeds from the sale of all publications go for the improvement of your National Parks and Monuments.

Bandelier National Monument, a unit of the National Park System, is one of 180 areas administered by the National Park Service, U. S. Department of the Interior.

The traveling public is becoming increasingly aware of the National Monuments, which have received less publicity than the great, well-known National Parks, yet which possess extremely interesting features.

Many of these are in the Southwest; we hope you will take the opportunity to visit one or more of them on your trip.

*Administered as a group by the Regional Director, Region Three,
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Saguaro National Monument, Rt. 8, Box 350, Tucson
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