

Spruce Tree House

Donation

25¢

if you take
it home.



You are now entering an area that has changed very little in 700-800 years. To the prehistoric inhabitants, a people we call the Anasazi, the canyons provided food, shelter and other materials for daily survival. Some of the most important plants to the people of Spruce Tree House are located just down the trail. Please walk the 50 feet (16 meters) to the bench and boulders, and STOP and LOOK at the plants near the bend in the trail.



Juniper

1 From this point you have a commanding view of the canyon area. Notice the abundance of vegetation and think about how you would use these plants. The two types of low-lying, evergreen trees visible are the pinyon pine and juniper. The rough-barked pinyon has short, smooth needles grouped into bunches of twos or threes. In the fall the pine cones yield delicious nuts that can be gathered and boiled, roasted, or eaten raw. The more shaggy-barked juniper has leaves that have evolved into closely overlapping scale-like twigs grouped together in clumps. The junipers produce a grey-green berry which was used to flavor various dishes, much like we use it today to flavor gin. Both trees had certain medicinal properties, while the juniper bark could even serve as diapers for young children. Combined with their importance as roofing material and firewood for cooking or keeping warm, these trees were valuable products for the Anasazi.

The spiny-leaved, cactus-like plants at the bend of the trail are broadleaf yuccas, one of the most versatile products available to the prehistoric Indians. They wove the fibrous leaves into baskets, ropes, mats, sandals, and items of clothing. The sharp tips of the leaves served as needles for sewing. In the spring milky flowers made tasty additions

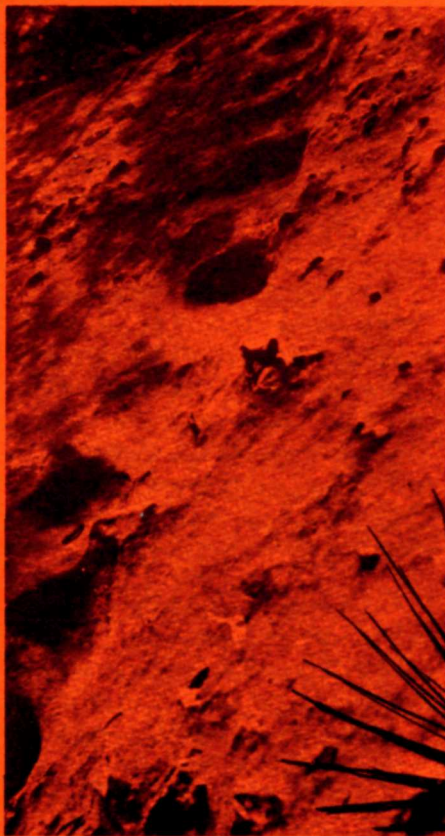


Pinyon

to the Anasazi diet, while the fall fruit looked similar to a cucumber but had the flavor of a starchy melon. Even the roots yield a soap which the Indians used to wash their hair.

Behind the yuccas is a large shrub called the Utah serviceberry. Its white spring flowers ripen during the fall into dry berries which could be eaten raw or preserved for flavoring. The wood was available as another construction material. Along the trail ahead of you are many Gambel oak trees, the tangled, shrubby tree with the characteristic oaklike leaves. Oak wood made good digging sticks and bows. The acorns could be gathered, roasted and added to other food.

Hand and foot trail.



Please continue down the trail to the next stop but remember that this is not a path the Anasazi would have used. These people climbed up and down the dirt slopes, going around or over the large boulders. At the steep cliff face they carved small notches into the sandstone which were just deep enough to hold the front part of a hand or foot. Using such hand and toe hold trails, they climbed up and down from the alcoves to the mesa tops throughout the year.



The geology of Mesa Verde determined what sort of shelter the Anasazi had as well as the type of water supply that was available. The tan cliffs around you are composed of sandstone, a porous rock which allows rain, snow and running water to slowly seep down through it. Beneath this sandstone is a layer of shale through which the moisture cannot penetrate. Water reaches the shale, flows between the two layers and emerges in the form of a seep or spring such as the one at the head of this canyon. In the wintertime when the moisture freezes, it cracks and

loosens the sandstone causing pieces to break away. This gradual process of cracking and collapse produces the overhangs where you see the cliff dwellings today.

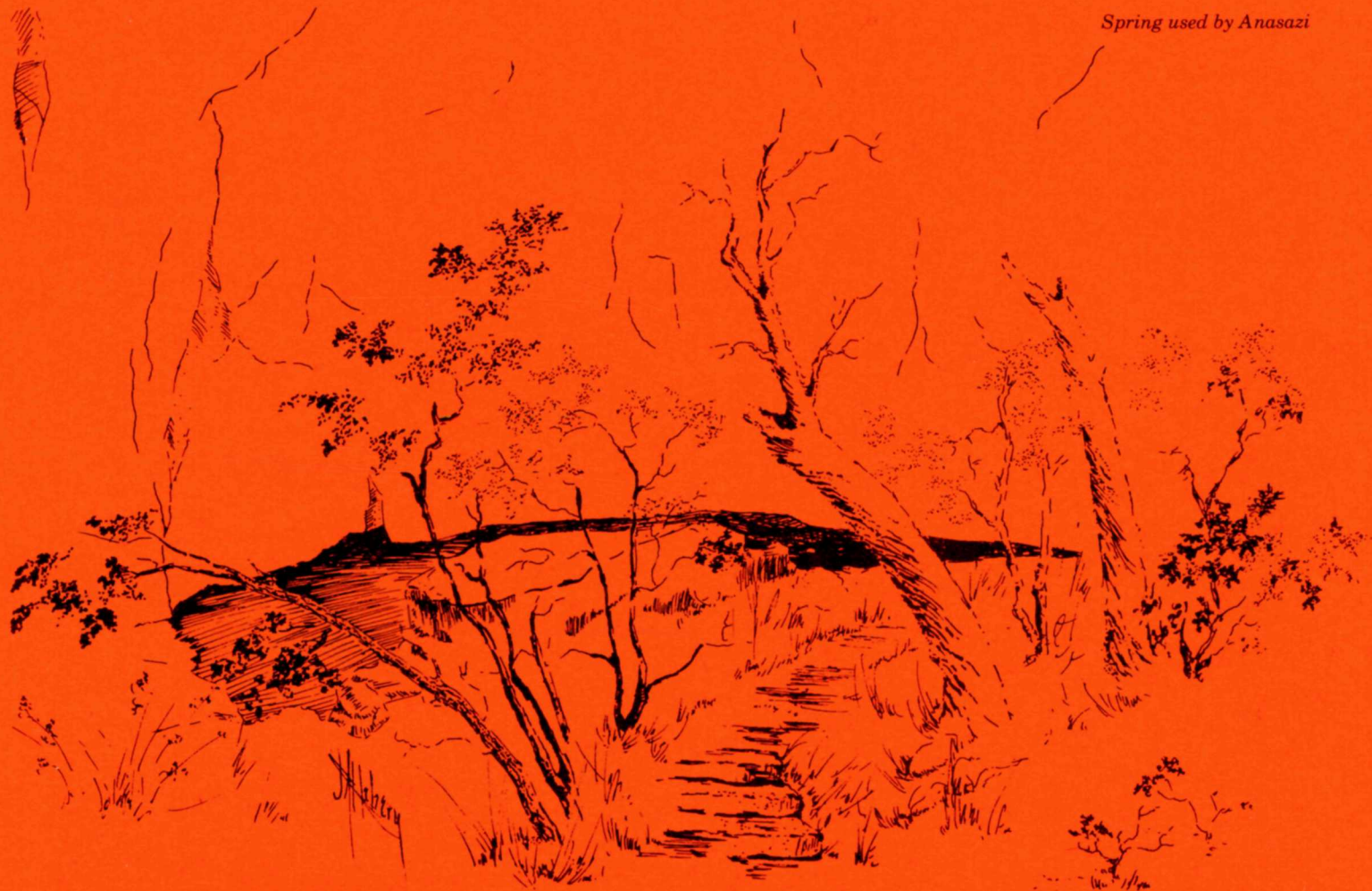
The Anasazi living in Spruce Tree House were fortunate to have this spring so close to their dwelling. Even though the spring appears to produce very little water, it had to supply a community of some 100 people. Imagine how carefully these people would have used this water for their daily cooking, drinking and construction needs.

The spring also accounts for the lush vegetation in this area. Since the narrow canyon is shaded most of the day, moisture does not evaporate at the rapid rate that it does on the mesa top. Compare the tall, sturdy,

spiraled oak trees behind the benches to the shrubby ones elsewhere along the trail. Not only does a plentiful water supply produce larger plants, it also encourages a wider variety of them to grow. The Anasazi must have made good use of such oases in an otherwise dry environment.

If you walk up to the spring, please be careful to stay on the pathway and avoid trampling the delicate vegetation. Also be cautious of the POISON IVY which grows along the trail. The next stop is at the first courtyard of Spruce Tree House itself.

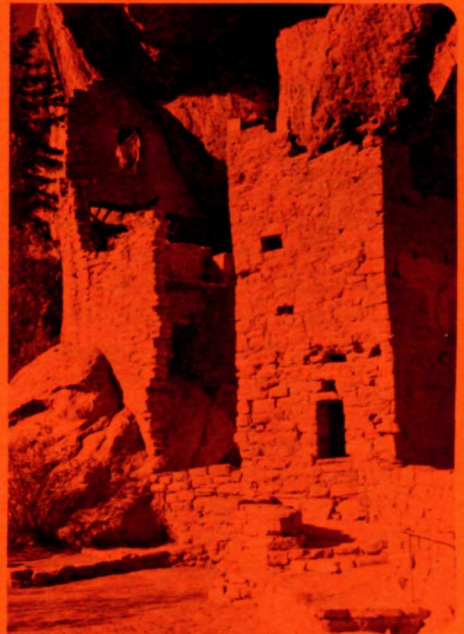
Spring used by Anasazi



Spruce Tree House, the third largest cliff dwelling among several hundred within park boundaries (Cliff Palace and Long House are larger), was constructed between A.D. 1200 and 1276 by the Anasazi. The dwelling contains about 114 rooms and eight kivas (kee-vahs), or ceremonial chambers, built into a natural cave measuring 216 feet (66 meters) at greatest width and 89 feet (27 meters) at its greatest depth. It is thought to have been home for about 100 people.

Spruce Tree House was opened for visitation following excavation by Dr. Jesse Walter Fewkes of the Smithsonian Institution. Dr. Fewkes removed the debris of fallen walls and roofs and stabilized the walls approximately as you see them now. Due to the protection of the overhanging cliff, Spruce Tree House had deteriorated very little through the years and has required little supportive maintenance.

The cliff dwelling was first reported in 1888, when two local ranchers chanced upon it while searching for stray cattle. A large tree, which they identified as a Douglas spruce, was found growing from the front of the dwelling to the mesa top. It is said that the men first entered the ruin by climbing down this tree, which was later cut down by another early explorer.



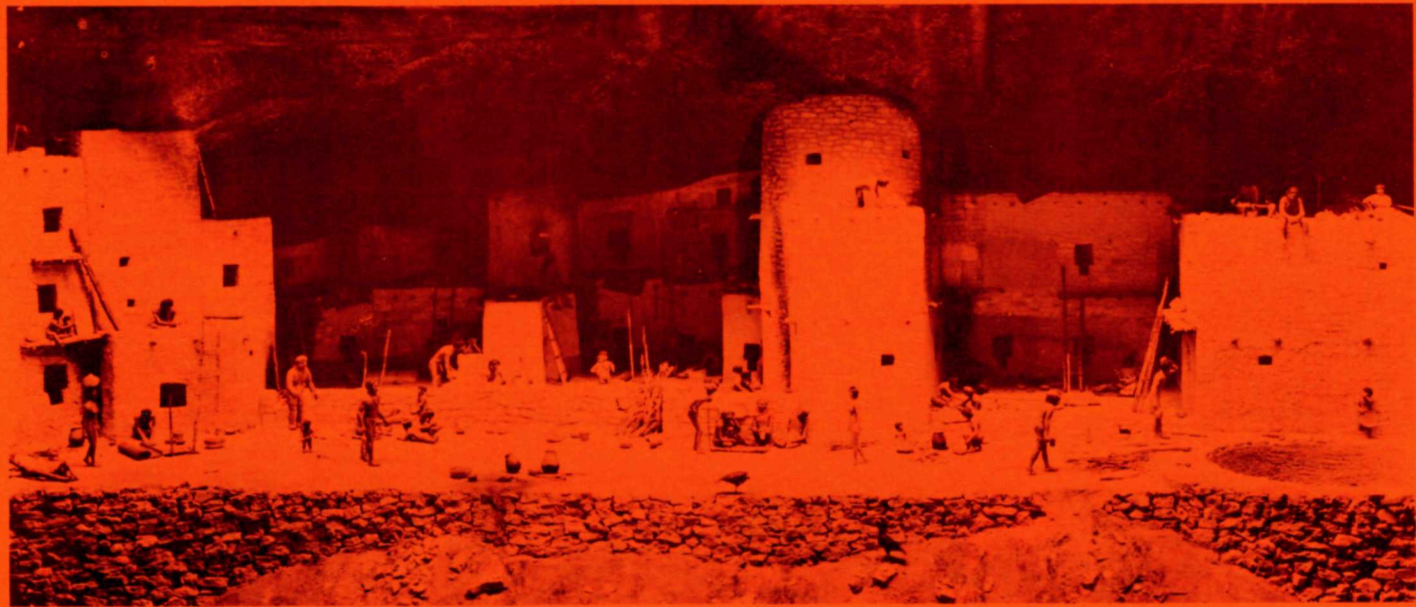


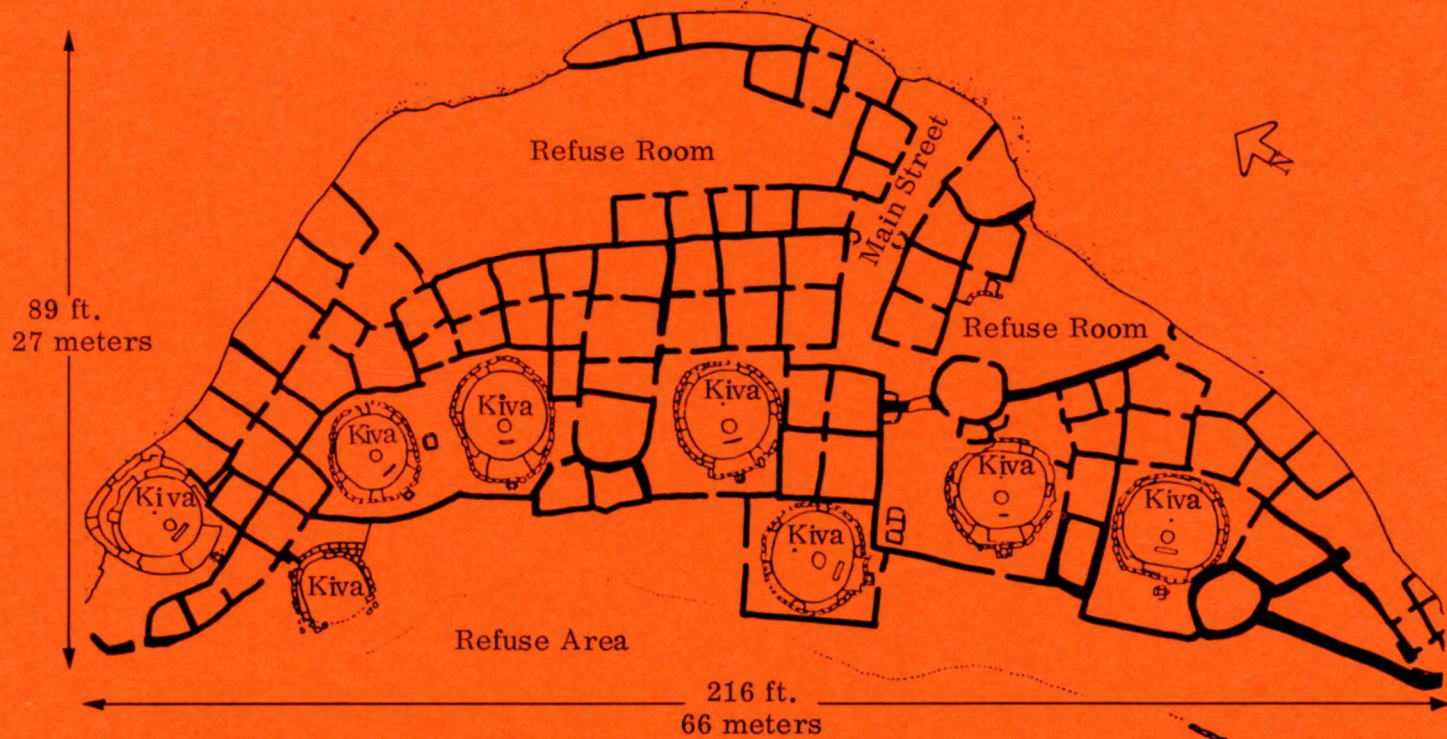
This photo was taken in the 1890's from a point near where you are standing. Compare it with what you now see before you. It is National Park Service policy to stabilize or reinforce rather than rebuild existing structures. As a result, Spruce Tree House is approximately 95% original.

As you enter Spruce Tree House remember that you are walking through someone's home. Look for signs that might indicate what

daily life was like here. Imagine what it would be like if *you* lived here. How would you cope with the cold? Where would you prefer to live? Where would be the best

places to work, to sleep, or to gather for ceremonies? Remember, too, that some Pueblo peoples consider Spruce Tree House to be their ancestral home. Please treat it with respect.



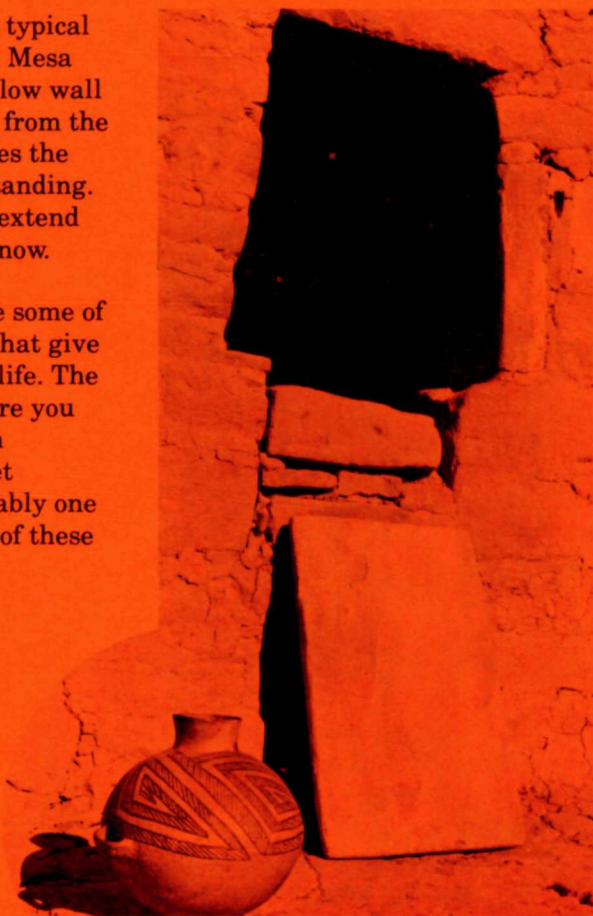




First courtyard.

3 This first courtyard is typical of many courtyards in Mesa Verde Cliff Dwellings. The low wall in front sets the area apart from the refuse dump which underlies the surface on which you are standing. This wall probably did not extend any higher than you see it now.

While standing here, notice some of the architectural features that give us an insight into Anasazi life. The large, three-story wall before you fronts about 20 rooms, each approximately 6x8x5½ feet (1.8x2.4x1.7 meters). Probably one or two people lived in each of these



rooms, which were primarily used as bedrooms or as work areas in unpleasant weather. On favorable days, the families lived and worked in the courtyards, on the rooftops and on the balconies which extended from the front of the building. The original wooden supports of a balcony can be seen along the top left section of the back wall.

Entrance to the rooms was gained through the rectangular and T-shaped doorways. Shape was apparently a matter of personal preference, each type having advantages and disadvantages. During cold weather, animal hides or sandstone slabs (such as the one leaning against the wall) were used as doors.

Sandstone slab for door.

The cave's ceiling and most building walls are covered with a heavy layer of soot. Archaeologists have speculated that fires may have burned in the rear of the cave 24 hours a day during the coldest months of the year (see map on page 9). The Anasazi burned fires in some rooms to keep warm, but since most of the rooms were not adequately ventilated they must have been very smoky.

When Spruce Tree House was occupied, the courtyard before you was filled with activity. Here women ground corn into flour, made pottery, wove baskets and prepared food. Men made stone tools, turkey feather or cotton blankets, or prepared for summer planting. Older people sat in the sun and talked, while children, domesticated turkeys and barking dogs scurried about the plaza. The ladders in the courtyard protrude from two kivas

whose roofs have been restored by the National Park Service. The purpose of the kivas will be explained at Stop 6. Virtually all kivas in Mesa Verde lost their roofs through weathering, and only a few have been reconstructed.



Plastering the wall.

4 The three-story building to your left has a design drawn on the back wall of the second story. The residents of this village attempted to brighten the sandstone walls with colored plaster. This is one of many designs found throughout Anasazi structures and may have been either symbolic or purely decorative.

To the right of the design, part of a balcony is still in place. This balcony once extended completely across the back wall of the courtyard. Just above the balcony a filled-in doorway can be seen. The residents often remodeled their homes to satisfy their changing needs.



You are now standing in front of the deepest portion of the cave. From here it extends about 60 feet (18 meters) to the back wall. Beyond the roofless kiva in the foreground, there are three rows of rooms and a large trash area in the rear. Apparently refuse was disposed of both in front and in back of the living quarters. The path on which you are standing rests on one of these trash mounds which was also used as a burial area. This was not disrespectful but merely a matter of practicality. The trash areas were the easiest places to dig in during the winter months. Occasionally burials are also uncovered in sealed rooms in the back of the caves. Although numerous remains have been found, they do not account for the number of people who would have died during the period that Spruce Tree House was occupied. This is one of the many unsolved mysteries that archaeologists encounter.



"Kiva Life" Painting by National Geographic Artist Peter V. Bianchi.

5 The ladder descends into a kiva reconstructed by the National Park Service. The features are more readily visible in the open kiva at Stop 6 and will be explained in detail there. Please feel free to enter. The ladder descends about 6 feet (2 meters). Since it is the only way in and out, please be careful not to step on other people's hands as you enter.

When inside, notice the cribbed construction of the roof and the way the roof rests on six pillars around the kiva periphery.

This kiva is a religious structure and is *still* sacred to Pueblo people. Please enter it with respect.

6 Look into the kiva at the right as you read this.

Archaeologists have inferred the uses of this room from the kivas of present day Pueblo peoples, who are believed to be the descendants of the Anasazi. In modern Pueblos, groups of men and women form special societies to care for the spiritual needs of the village. These societies have several major concerns: ensuring favorable growing weather, curing illness, guaranteeing successful hunts and harvests, bringing about village harmony and perpetuation of the people. When no ceremonies are taking place, the kiva may be used as a work area or as a social gathering place. It is assumed that kivas had similar functions in the past.



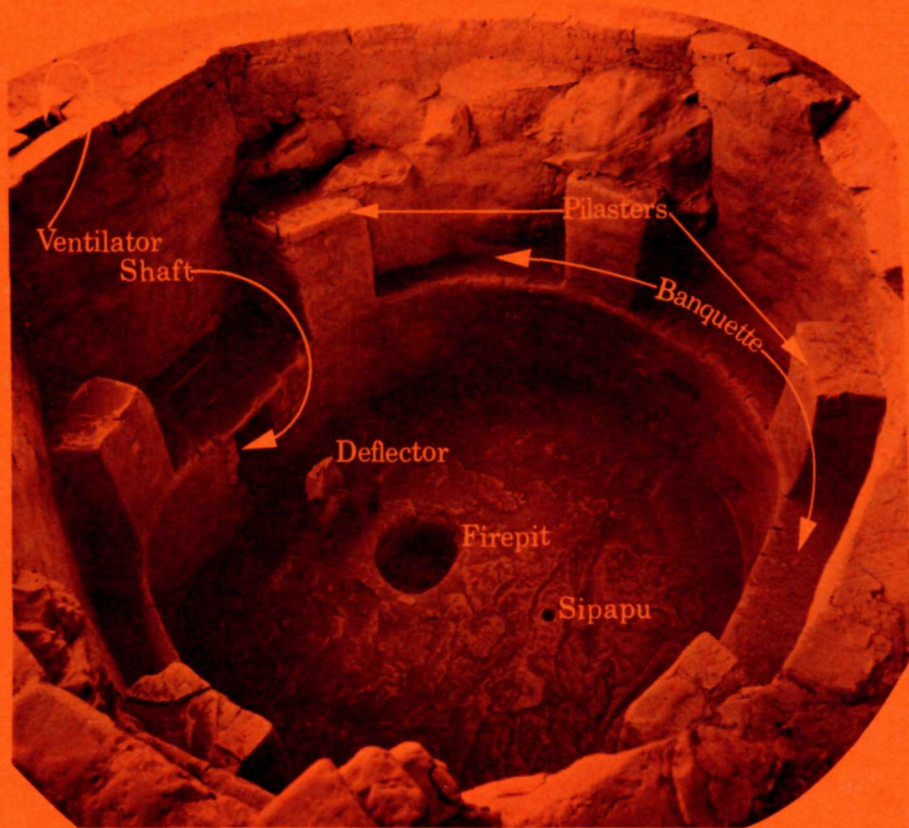
View of Kiva and adjacent rooms.

In contrast to the living rooms, the kivas had an efficient ventilation system. The large pit in the center of the floor was a fireplace. Fresh air was drawn in through the ventilator shaft at your feet, hit the deflector wall between the ventilator outlet and the firepit and circulated evenly through the kiva. Smoke rose vertically through the entryway. Beyond the firepit in the center of the floor is a small hole. This hole, called a sipapu (see-pah-poo), represents the opening through which man emerged onto the face of the earth and was important in certain ceremonies. Sipapus are still found in some modern kivas. Small openings are often found in the walls of the kivas, as is the case here. These openings, called niches, held special ceremonial objects such as turquoise, shell beads and prayer sticks. There are six pillars, known

as pilasters, built upon a bench, or banquette. The bench was used for storage of many ceremonial objects;

the pilasters supported the beams of the roof.

Features of a Kiva.



To the rear and left of the kiva is a large boulder. Look at it closely. Can you see shallow grooves where people ground and sharpened tools?

Stone axe and grooves.

The cylindrical room above the boulder, one of many in Mesa Verde, remains a mystery to archaeologists. On the mesa top round structures are often connected to a kiva by a tunnel perhaps indicating some kind of

ceremonial use. These buildings are also found on canyon over-looks, suggesting that they served as lookout towers. Here, however, the room is not connected to the kiva, nor does it command a good view of the canyon.



In the front left corner of the courtyard are grinding bins. Here women knelt with their heels against the back wall and used the mano (mah-no), or hand stone, to grind corn, nuts, berries and roots on the large flat stone, or metate (meh-tah-tay). As they ground the food, the soft sandstone grit was also mixed with the food. This abrasive mixture ground down the Anasazi's teeth and must have caused them great pain.



Modern Hopi women grinding corn 1895.

"Reprint by permission of Ward Ritchie Press from PHOTOGRAPHER OF THE SOUTHWEST."

7

When you take a close look at Spruce Tree House, you can see that very little restoration has been done on the dwelling. About 90% of Spruce Tree House is original and still intact. No attempt was made to reconstruct areas which were already in ruin when archaeologists

first excavated and stabilized here. It is National Park Service policy to remortar gaps in the wall and do minor repair work on a regular basis to prevent deterioration but not to reconstruct the dwelling itself. The wall behind this kiva is one of the few places in Spruce Tree House where some reconstruction was necessary. Notice the jagged

tracing that forms an arc along the wall. The entire center section of this wall collapsed into the kiva sometime after the Anasazi left the area. In an effort to prevent the upper portion and sides from also falling, archaeologists reconstructed the walls as they thought it originally looked. The same techniques have been used throughout Mesa Verde, and sometimes it takes close observation to tell the difference between Anasazi work and our modern day repairs.

Along the top of the wall to the right of the kiva is a series of stones which seem to be randomly placed there. At first glance you might think that this was done recently, yet these stones represent a dry wall constructed by the Anasazi. Whether a mortared wall collapsed and the stones were stacked as temporary repair work or if the wall was built deliberately in this fashion, we will never know. The fact is that the stones have remained in this condition for hundreds of years and have not



Courtyard wall before reconstruction.



Drywall section.

required stabilization to this day. At the far right end of the dwelling are two small rooms nestled against the face of the cliff. These are storage rooms where the Anasazi placed corn, beans, squash or other food after it was harvested and dried. The rooms were sealed shut with a sandstone slab to prevent rats and mice from invading the food supplies. Rooms such as these are typical in all cliff dwellings. As you came down the trail, you may have noticed other small rooms high in the cliff face near the spring area. These were also storage rooms associated with Spruce Tree House. Imagine how important it must have been for the Anasazi to store up enough food to last them during the long, cold winter months.

Now that you have examined Spruce Tree House, you may be wondering why people moved into such a place or, for that matter, why they left after having gone to such an effort to build it. The reason (or reasons) behind the Anasazi move into the caves are difficult to determine. It was once thought that they may have moved down from the mesa tops for defensive purposes, but no evidence of hostile neighbors or warfare has yet been found. It is also suggested that they may have moved into the caves to better protect themselves from the elements. We just don't know. The reasons for their departure are more certain. The Anasazi had lived on the Mesa Verde for well over seven hundred years by the time they began constructing the cliff dwellings. During this time the population was growing rapidly.

Storage bin.





Years of farming had depleted the land. Timber was probably becoming scarce. The forage for game may have diminished, forcing hunters farther afield. And, added to these problems, tree ring studies

have shown that the area suffered through a prolonged drought from about A.D. 1276 to 1299. There may have been other complicating factors too; at any rate, the Anasazi had had enough and began migrating south during the late

13th and early 14th centuries. Today, the descendants of these people — the Hopi and other Pueblo dwellers — live in northern New Mexico and Arizona. Utes, Navajos and Apaches now occupy much of their domain.





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