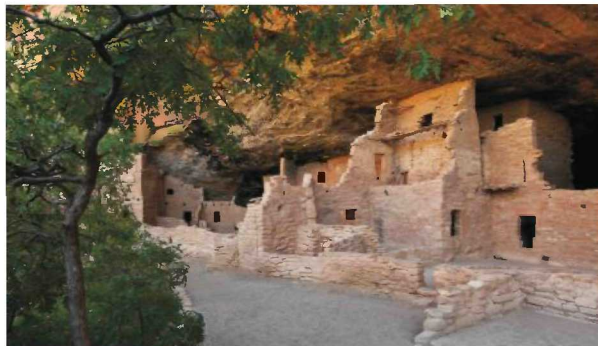


SPRUCE TREE HOUSE



Welcome to Spruce Tree House, the third largest and best preserved cliff dwelling in Mesa Verde National Park.

The short but steep walk rewards you with an intimate look at a village occupied by Ancestral Pueblo people between about A.D. 1200 and 1280. The loop trail begins and ends on the mesa top just outside the Chapin Mesa Archeological Museum.

Round trip distance is about ½-mile (1km); elevation change is about 100 feet (30 m). If you wish to avoid stair steps, follow the trail signs into the site and then retrace your path to return to the rim rather than completing the loop. Please take your time and visit this ancient community with respect.

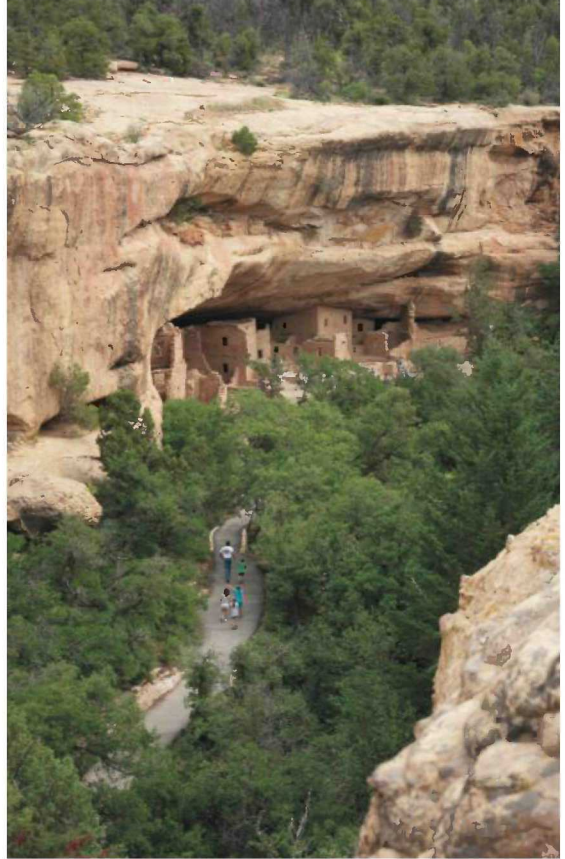
Spruce Tree House is one of more than 600 cliff dwellings within Mesa Verde National Park, but is much larger than most. Most cliff dwellings here are set in alcoves in the Cliff House Sandstone, and consist of just a few rooms. As you enter this unusually large alcove site, remember the smaller nearby villages that were inhabited at about the same time. Spruce Tree House was part of an extended community that included a few large cliff dwellings, many small settlements in alcoves, and some mesa top villages, farms, and gardens. Spruce Tree House was first systematically excavated in 1908 by Dr. Jesse Walter Fewkes. Early explorers named it for the towering Douglas-fir trees (historically referred to as spruce trees) found in the canyon bottom below the alcove.



The hard, reddish-brown nodules in the sandstone around you are naturally occurring, hard masses of iron oxide and/or calcium carbonate called concretions. They were deposited as mineralized water moved through the sandstone, sometimes encasing pebbles or filling small voids with the minerals carried in the water. Some

concretions look like pipes, some are hollow, others are solid. The Ancestral Pueblo people used and modified similar concretions.

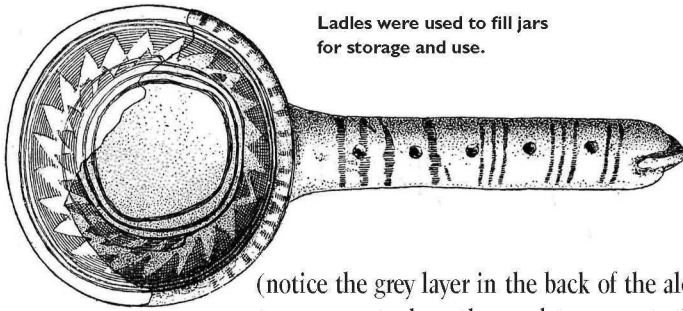
1 The forest around you and throughout the park is very similar to the environment the Ancestral Pueblo people knew and used. Slow-growing piñon pine and juniper trees, yucca, Utah serviceberry, chokecherry and Gambel oak are common here. The Ancestral Pueblo people harvested these plants, and many more, for construction materials, firewood, food, clothing, tools and medicine. Although the trail you are using did not exist in ancient times, there are several hand-and-toe-hold trails near the head of Spruce Canyon



that Ancestral Pueblo people pecked into the stone cliffs and used to travel up and down the canyon walls. They climbed up to work their fields, gather food, and hunt on the mesa tops, then climbed down again, carrying whatever they needed back into Spruce Tree House.

Continue down the switchback trail, staying to the left at the sign.

2 Are you enjoying this shady spot? The vegetation here is well watered by a nearby natural seep spring. Stay on the trail as you walk up to see it; poison ivy thrives here too. This was the main water source for the residents of Spruce Tree House. Seep springs form where rain and snowmelt percolate down through porous sandstone to an impermeable layer of shale



Ladles were used to fill jars for storage and use.

(notice the grey layer in the back of the alcove). The water seeps out where the sandstone meets the shale.

Ancestral Pueblo people used much less water than we do today, but they probably supplemented the water this small spring provided whenever possible. During summer thunderstorms, they collected rain water in pottery vessels carefully placed to catch runoff from above. There is one unusual room in Spruce Tree House containing a large, plastered sub-floor pit that may have been a cistern where water was stored for later use.

Ancestral Pueblo people maintained reservoirs on mesa tops and in canyon bottoms and built check dams across drainages; the small dams captured the soil and moisture so important to farming. They grew corn, beans, and squash in their small fields, and encouraged wild edible and useful plants wherever

Check dams helped collect soil and surface water for small pockets of crops.



they could. Mesa Verde receives an average of 18 inches of precipitation annually today and has a frost-free growing season averaging about 150 days. Tree ring and pollen evidence suggests conditions were similar when they lived here. Archeologists find thousands of small corn cobs, dried squash stems and seeds, and the occasional cache of corn kernels or dried beans which remind us of how successful Ancestral Pueblo farmers were.

Tucked into the cliff above are ten storage rooms that are part of the

Spruce Tree House Community. The people stored surplus corn, beans, squash, and wild plants such as wild onions, berries and piñon nuts in these rooms, which they reached using ladders and pecked hand-and-toe-hold trails. They sealed the doors with stone slabs to deter rodents and keep their food supplies dry.

Continue along the trail to the north end of Spruce Tree House.



3 This alcove has a long history of use which almost certainly predates this village. Notice the heavy layer of dark soot on the alcove ceiling and many of the walls. It was deposited centuries ago by small fires that the people built for cooking, light, and warmth. Notice the subtle differences between this soot and the dark streaks along the top of the canyon walls, which is a natural deposit commonly referred to as “desert varnish.”

Spruce Tree House as seen by Swedish scientist Gustaf Nordenskiöld in 1891. His guides and assistants in excavation and documentation were Richard, Al, and John Wetherill, ranchers from the nearby town of Mancos. Richard viewed and named Spruce Tree House in 1888. Look for the carved initials “R.W.” and “J.W.” as you explore the site.

Look into the doorway to your left for the following details:

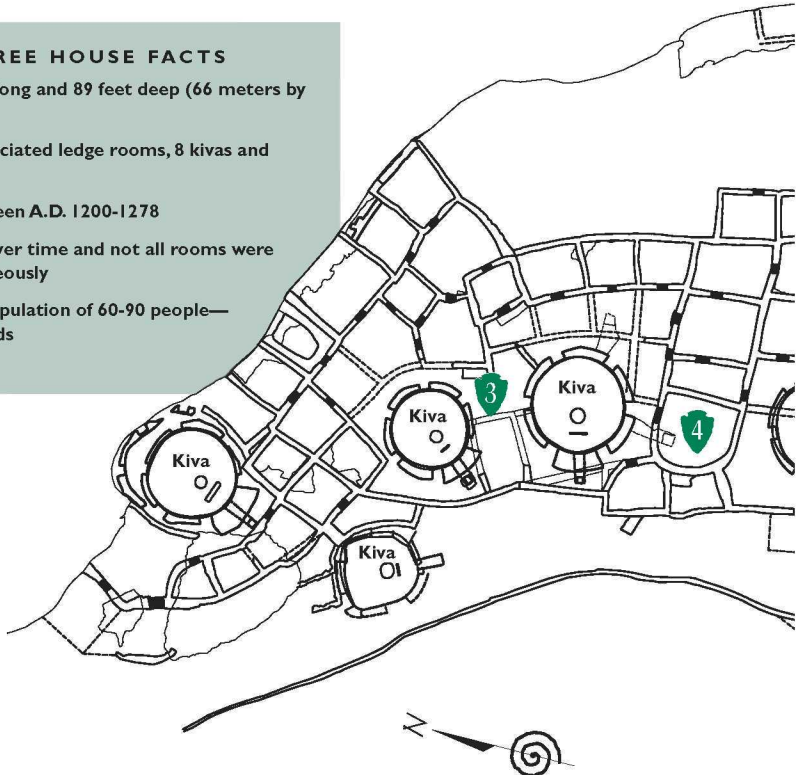
At ground level, look for a boulder with several petroglyphs including bird tracks and human footprints, and two tool grinding slicks (smooth ovals in the stone), possibly for shaping or sharpening axes. Look overhead to see what remains of the roof of the second story, which supported the floor of the third story. Also note the original plasters of tan and red, wooden wall pegs, and a sealed doorway.

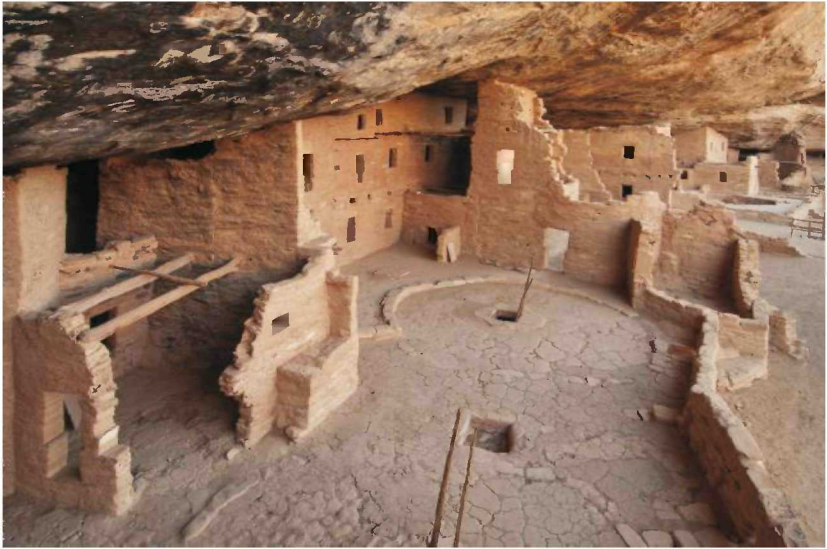
Now look at the kiva courtyard area to your right.

The low rock wall before you encloses two kiva courtyards. Kivas and courtyards were important places in the village, and almost always occur together. People used the courtyards every day as places to work and socialize, as well as for group gatherings. The ladders lead down into two of the eight kivas at Spruce Tree House. In modern pueblos, kivas are the gathering places for religious observances, social activities, and weaving. The Ancestral Pueblo

SPRUCE TREE HOUSE FACTS

- ◆ Alcove is 216 feet long and 89 feet deep (66 meters by 27 meters)
- ◆ 120 rooms, 10 associated ledge rooms, 8 kivas and two towers
- ◆ Constructed between A.D. 1200-1278
- ◆ The village grew over time and not all rooms were occupied simultaneously
- ◆ Estimated peak population of 60-90 people—about 19 households

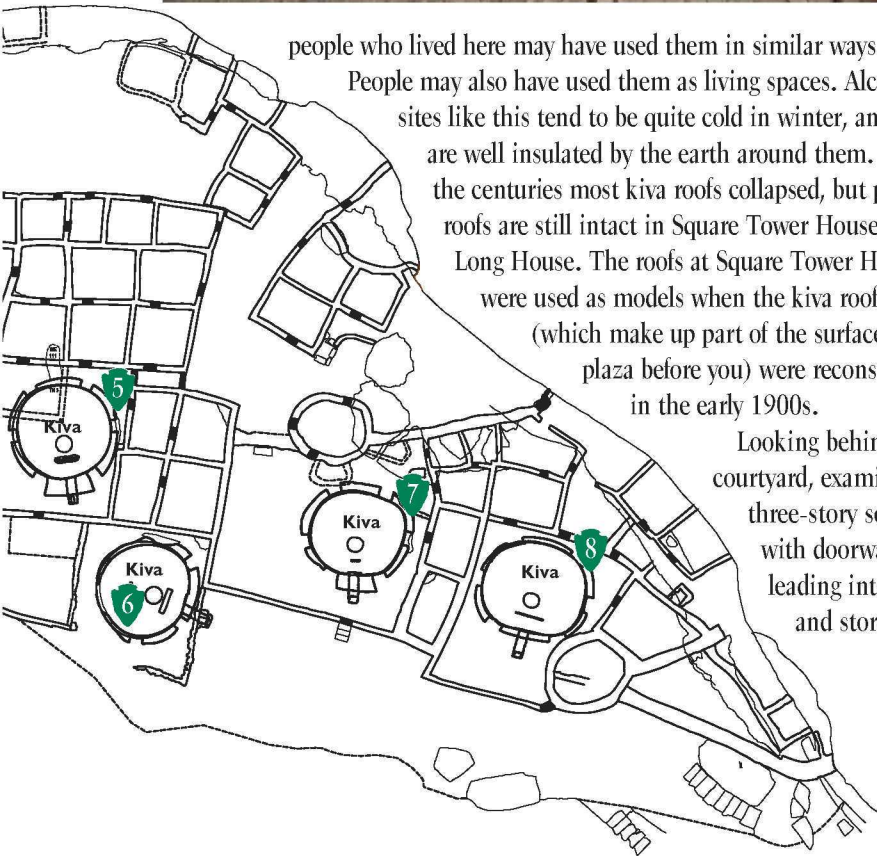




people who lived here may have used them in similar ways.

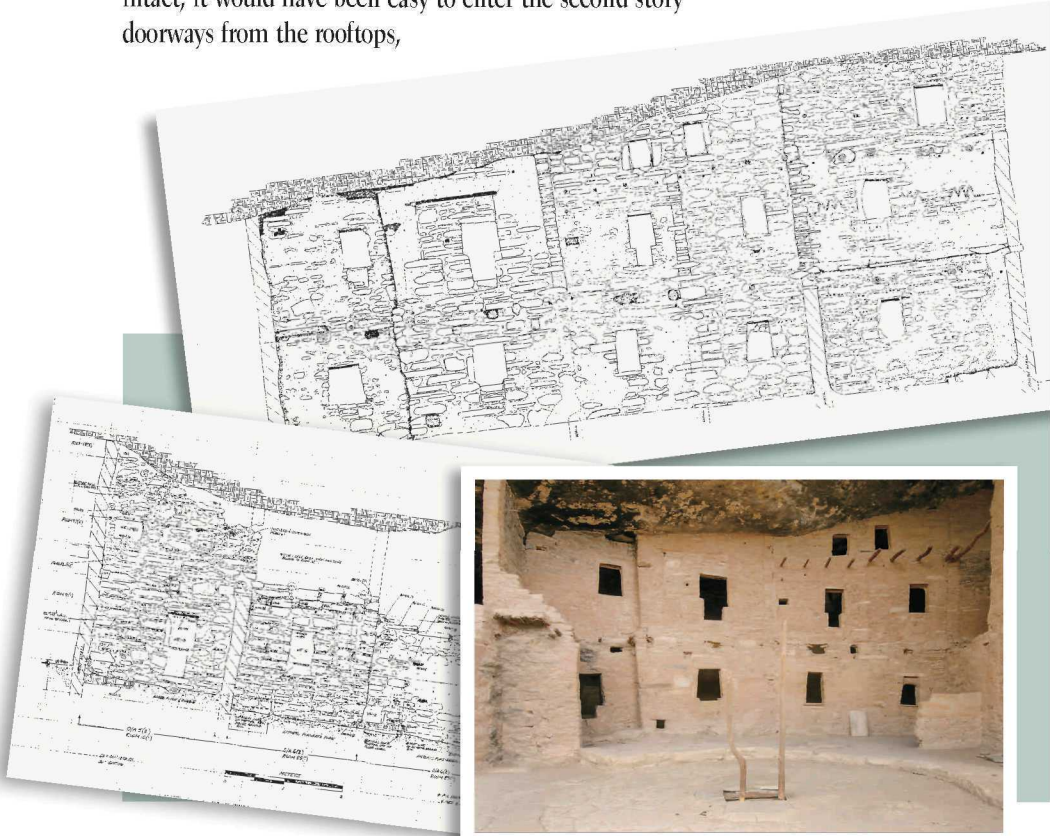
People may also have used them as living spaces. Alcove sites like this tend to be quite cold in winter, and kivas are well insulated by the earth around them. Over the centuries most kiva roofs collapsed, but partial roofs are still intact in Square Tower House and Long House. The roofs at Square Tower House were used as models when the kiva roofs here (which make up part of the surface of the plaza before you) were reconstructed in the early 1900s.

Looking behind the courtyard, examine the three-story section with doorways leading into living and storage



rooms. These openings may look like windows, but they are one of the two common types of doorways at Mesa Verde. Some doorways are rectangular in shape, while others are T-shaped. T-shaped doorways are found in Ancestral Puebloan sites throughout the Four Corners region and Mexico. The builders may have chosen to use the T-shape for practical purposes, such as allowing easier entry for someone carrying a large load. Archeologists studying the layout of cliff dwellings and the placement of T-shaped doorways have suggested that they may lead into areas shared by more than one family, or into rooms where religious activities took place. Many T-shaped doors provide access to kiva courtyards.

Across the front of this three-story section of wall, the people constructed a series of single-story rooms which have collapsed. When the rooms were intact, it would have been easy to enter the second story doorways from the rooftops,



and a short ladder would have led to a third story balcony. Notice the beams that once supported the balcony extending out below the third story doorways.



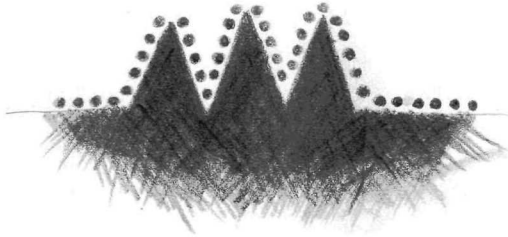
4 Ancient people were as interested in decorating their homes as we are today. Look carefully at the second story of the open wall. Can you see a painted geometric design, called a pictograph, on a plastered wall? In the A.D. 1200s, people commonly covered interior and some exterior walls with plaster. Usually they used white, tan, reddish-brown, and yellow colors but occasionally they chose blue and green pigments. The geometric design you see here was probably painted as a final decoration, after they had painted the entire wall with white plaster and then painted the lower third of the wall with red plaster, creating a 'dado'.



Plaster conservators from the University of Pennsylvania work with park archeologists to document and conserve the fragile plaster surfaces found throughout the park.

Notice the series of triangles with red dots, and the white floor band

Mesa Verde archeologists are studying how spaces were used in the cliff dwellings, and examining the sequence of room construction to learn how the village grew over time. By determining when various rooms were built and occupied, the way they were remodeled, and the relationship of rooms and spaces to each other, archeologists and anthropologists can begin to understand the social organization that governed this culture. Scientists look for special features like hearths and storage racks that help explain how the Ancestral Pueblo residents used each room. Mesa Verde's Architectural Documentation project began in 1999 at Spruce Tree House, as part of the Save America's Treasures Program. The detailed hand-drawn maps, photographs, and data collection reveal nearly every aspect of construction. This information, combined with the precise chronology obtained through tree-ring dates, provides insights into how the village changed over time: critical knowledge for future site management, research, and long-term preservation.



Perhaps suggesting landscape features, this design can be seen in plaster details throughout the Mesa Verde area.

with a series of triangles and dots at the base of the wall. In addition, the residents painted animal and bird figures on the white background; only traces are visible now.



Behind this kiva and the surrounding courtyard and rooms is a large open space at the back of the alcove. When Dr. Jesse Walter Fewkes excavated the site in 1908, he thought it was probably an area for refuse disposal, based on the large variety of items he found. They included turkey bones, potsherds, corn cobs and husks, yucca and feather cord, worked wood, bird droppings, and corrugated pottery jars.



This large, open space at the back of the alcove may have had many different uses during the occupation of Spruce Tree House.

Some present-day Pueblo elders have suggested that the open space was used as a dance plaza at some point in its past. Archeologists today suspect that its use may have changed over time. They speculate the space was used for daily and religious activities at times, based on the heavy soot layer coating the ceiling and walls. When it was in nearly constant use, fires would often have been lit for light and warmth. The artifacts found

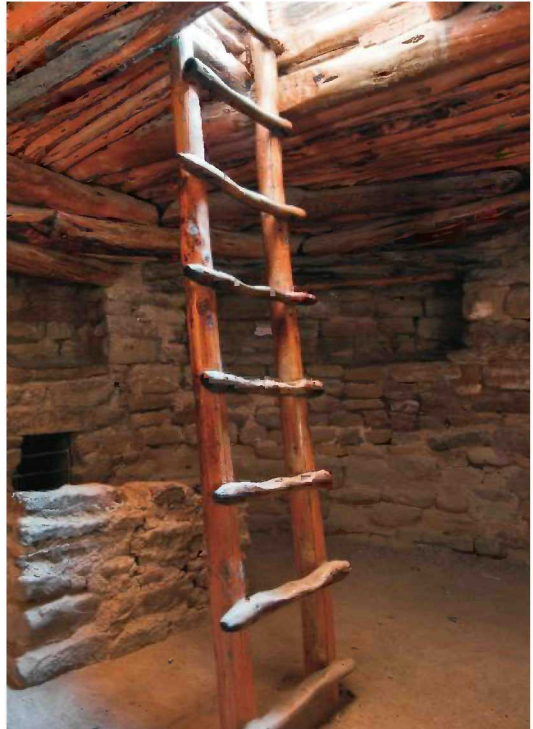
by Fewkes and others suggest that this area may also have been used at another time for food storage and as an enclosure for turkeys. Ancestral Pueblo people kept wild turkeys as domesticated livestock and relied on the feathers, meat, and bones.



The word kiva comes from the Hopi language. Many modern pueblos include kivas as central

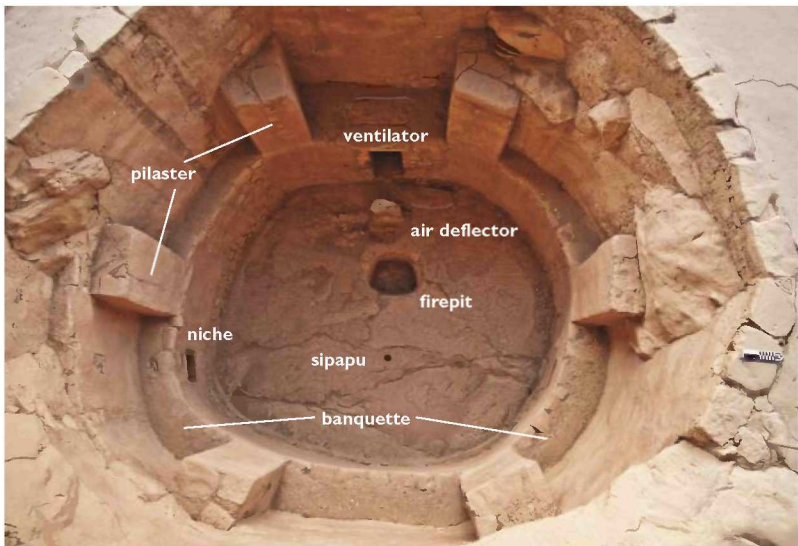
places within the community. This ancient kiva was initially re-roofed by the National Park Service in 1908 so that park visitors could gain a sense of what these special rooms were like. Climb down the ladder if you wish, just as the original residents would have done. Inside, look for the wooden roof beams laid in cribbed fashion and resting on six upright pillars, called pilasters. Like the reconstructed kiva roofs at stop 3, this reconstruction was based on existing kiva roofs and is probably much like the original. Several floor features, including a firepit and sipapu, have been covered for visitor safety. These features will be described at the unroofed kiva at the next stop.

Visitors may enter this kiva to see some of its unique architectural details.



This unroofed kiva includes many features you'll see in kivas at other Ancestral Pueblo sites. Six upright masonry pilasters, built upon a bench called a banquette, supported the roof beams. In the center of the

floor is a firepit adjacent to a standing stone deflector. Note the ventilator opening in the kiva wall, and the chimney-like shaft that drew in fresh air from outside. When a fire was burning in the firepit, fresh air would be drawn into the kiva through the ventilator but deflected from blowing directly across the flames. Smoke would rise out through the same opening in the roof where the ladder was placed. The small circular hole in the floor is called a sipapu. Modern Pueblo people consider the sipapu a symbolic entrance into a former world. Small rectangular openings in the banquette wall are niches, likely used for storing objects. As you consider kivas throughout the Ancestral Pueblo region, remember that the kivas would have been roofed while they were in use. Rather than the deep circular structures we see today, the ancient residents would have seen flat earthen courtyards with ladders leading downward into kivas as you saw at stop 3.



Kiva courtyards like this one were busy places. Look for a large boulder between the kiva and the circular room behind that has shallow grooves worn into it from the grinding and sharpening of stone tools. Also note the historic words “No.1 House” carved into the rock, presumably incised during early scientist Gustav Nordenskiöld’s first visit in 1891. In the front corner of this

courtyard, find the three grinding bins where Pueblo women knelt to grind corn and seeds, using a large stone called a *metate* as a base, and a smaller hand grinding stone called a *mano*.



Spruce Tree House is considered the best preserved cliff dwelling in Mesa Verde National Park, with many intact walls and roofs, wooden beams, and plastered walls. Most of what you see today is original construction from the A.D. 1200s. One exception is the central portion of the two-story wall beyond this kiva. In the pre-excavation photo below, notice the large section of wall which had fallen into the kiva. Because Dr. Fewkes believed this wall would further collapse unless the missing section was replaced, he reconstructed it during his excavation and stabilization efforts in 1908.



In the same manner as their pueblo ancestors, Hopi maidens grind corn, circa 1890.

Thomas McKee took this photo before Dr. Fewkes' stabilization work.



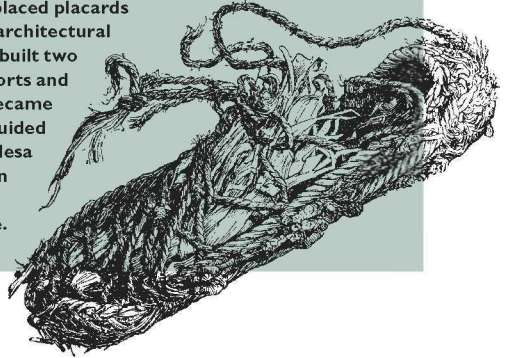


Dr. Jesse Walter Fewkes

features; repaired some walls, and rebuilt two kiva roofs. Dr. Fewkes published reports and maps of Spruce Tree House, which became the foundation of the park's ranger-guided tours of the site for decades. When Mesa Verde's Architectural Documentation Program began in 1999, new understandings of the site began to emerge.

In 1908, just two years after the park's establishment, Spruce Tree House was selected for excavation and stabilization in order to prepare it for public visitation. In May and June, Dr. Jesse Walter Fewkes and his crew, working under the direction of the Secretary of the Interior and the Smithsonian Institution, cleared Spruce Tree House of all loose stone, dirt, and other debris. They collected and documented several hundred objects, including pottery jars, bowls, mugs and ladles; stone, bone, and wooden tools; leather and woven cloth fragments; and sandals and cordage manufactured from yucca. They also painted room numbers and kiva designations on the walls; placed placards and labels on architectural

Sandal—one of many fine illustrations in Dr. Fewkes' 1909 report.



Consider the amount of physical labor involved in the construction of Spruce Tree House. Without beasts of burden, metal tools, or wheeled vehicles, the years of construction here would have demanded physical strength, many hours of hard labor, and a clear vision of what a community should include. Like the other villages in Mesa Verde and throughout the surrounding area, the people left Spruce Tree House sometime between A.D. 1280 and 1300.

What motivated the Ancestral Pueblo people to migrate away from this area they'd inhabited for so many generations? It's impossible to be sure, but one factor almost certainly was the widespread drought from A.D. 1276 to 1299, revealed by ancient tree-rings. Evidence also suggests that populations had been growing up to the time of that drought, and that social and religious change and conflicts were occurring in some communities. Each Ancestral Puebloan village across the region probably faced slightly different

circumstances, but ultimately nearly everyone decided that leaving the region was better than staying.

Although we don't know why they left, we do know where they went, thanks to their descendants, the modern Pueblo peoples of the Hopi villages in northern Arizona, and the peoples of Zuni, Acoma, Laguna, and the Rio Grande pueblos of New Mexico. They maintain a way of life that was established over a thousand years ago in the Mesa Verde region. For many of today's pueblo people, Spruce Tree House and Mesa Verde are special places—the homes of their ancestors.

From here, you have the choice of continuing on the loop trail, which will lead you back to the trailhead via a different route, or of retracing your steps. If you wish to avoid stair steps, retrace your path to return to the rim rather than completing the loop.



To Our Visitors

Mesa Verde National Park offers a spectacular look into the lives of the Ancestral Pueblo people who made this land their home for over 700 years. Today, the park protects nearly 5,000 recorded archeological sites, including 600 cliff dwellings. These are some of the most notable and best preserved in the United States. Please do your part to protect them for all to visit and enjoy.

Most of the sites you see at Mesa Verde are over 750 years old.

- Please do not touch, sit, stand, or lean on their fragile walls.
- Since archeologists need to see everything in context to understand a site, do not disturb artifacts. Removing them is illegal.

Treat cliff dwellings and other archeological sites as you would a museum.

- No smoking or eating is permitted in the sites.
- Do carry and drink water.
- Only leashed service animals are allowed in sites or on trails.

Always stay on marked trails.

- Since people may be on trails below you, do not throw rocks or other objects into the canyons.
- Remember that the park is at a higher elevation than you may be used to; move slowly and drink plenty of water.
- If you have heart or respiratory conditions, be especially careful of your health.

We appreciate your help in preserving these priceless treasures for future generations.



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Written by Kay E. Barnett and Linda Martin.
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Cover background: plaster detail; inset: courtyard and kiva