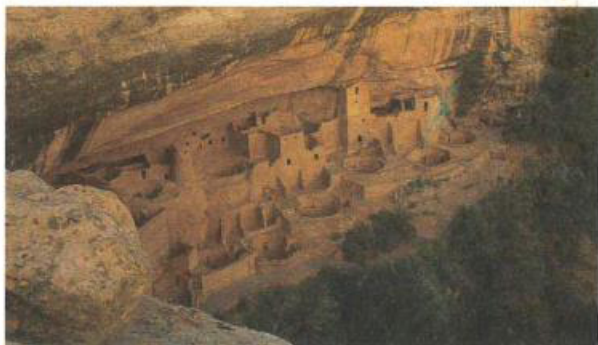


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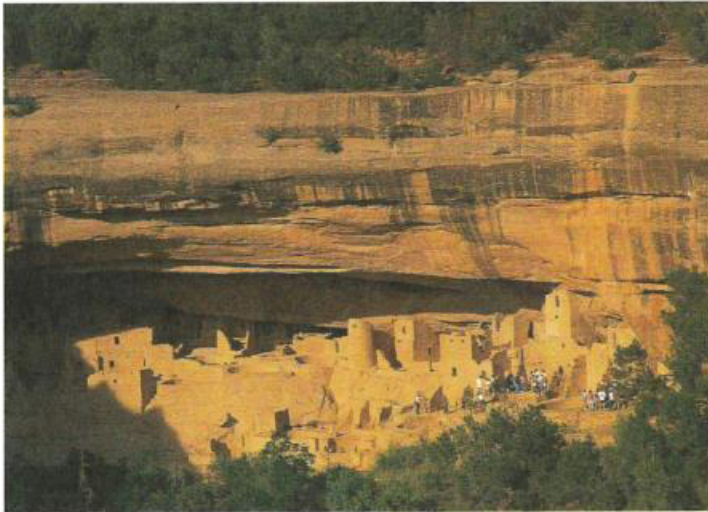
CLIFF PALACE



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Today only swifts and swallows and insects inhabit the airy alcove that protects Cliff Palace. But 800 years ago the dwelling was bustling with human activity. In this stunning community deep in the heart of Mesa Verde, Ancestral Pueblo people carried on the routine of their daily lives. This was also an important location within their world. Archeological research in the late 1990s reveals that Cliff Palace is different from most other sites at Mesa Verde, both in how it was built and in how it was used.

A ranger-led walk down into Cliff Palace provides a closer look at the layout and construction of the building, and gives tantalizing hints at what makes this site unique. The one hour guided walk requires a ticket. You will descend uneven stone steps and climb four ladders for a 100 foot vertical climb. Total distance is about ¼ mile round trip (.4 km).



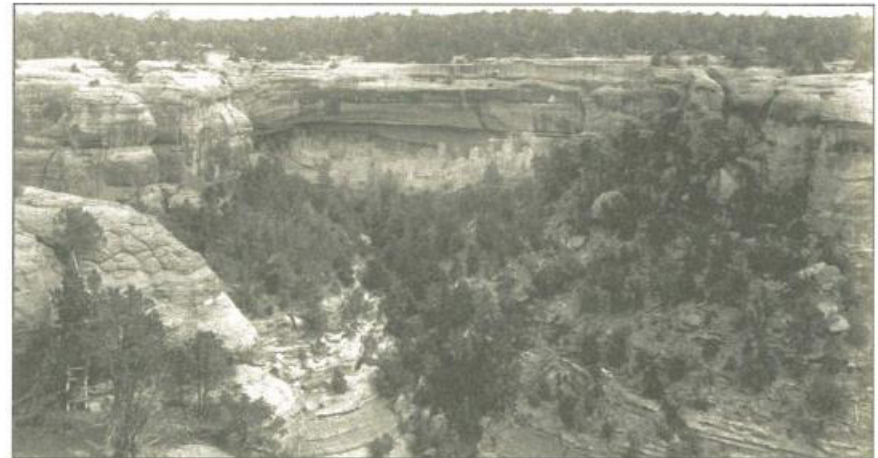
The crown jewel of Mesa Verde National Park and an architectural masterpiece by any standard, Cliff Palace is the largest cliff dwelling in North America. From the rimtop overlooks, the collection of rooms, plazas, and towers fits perfectly into the sweeping sandstone overhang that has largely protected it, unpeopled and silent, since the thirteenth century. It's impossible to be certain why Ancestral Pueblo people decided to move into the cliff-side alcoves about AD 1200 and build elaborate and expensive structures like Cliff Palace. However, the sciences of archeology, ethnography, dendrochronology and a host of other disciplines offer us insights into this era in our region's history.

"An Enchanted Castle"



One snowy December day in 1888, two cowboys from nearby Mancos chanced upon Cliff Palace while they were out herding cattle. Richard Wetherill and his brother-in-law, Charlie Mason, emerged from the dense pinyon-juniper forest at the edge of the canyon. Through a veil of blowing snow they observed what they said looked like "a magnificent city" in the cliffs across the canyon. After news of their 'discovery' spread, other people, including Richard's brother Al, stepped forward and claimed to have seen it earlier. Others, including the Ute Indians whose reservation then included Cliff Palace, did know about the site and its location, but it was the Wetherill family who made it famous by excavating the site and escorting visitors to see the ancient city.

The first person the Wetherills escorted to Cliff Palace was Frederick Chapin, who vacationed in the area in 1889 and 1890. Chapin, an experienced mountaineer, lowered a rope over the ledge and climbed down into the dwelling. He wrote: "It occupies a great space under a grand oval cliff, appearing like a ruined fortress, with ramparts, bastions, and dismantled



This modern photograph was taken near the point where the site was first seen by the Wetherills in 1888.

towers. The stones in front have broken away; but behind them rise the walls of a second story, and in the rear of these, in under the dark cavern, stands the third tier of masonry. Still farther back in the gloomy recess, little houses rest on upper ledges." Chapin suggested that Cliff Palace be turned into a museum and "filled with relics." Chapin Mesa is named for him.

In 1891, a young Swedish scientist named Gustaf Nordenskiöld came to Mesa Verde and was guided to Cliff Palace by the Wetherills. In his classic publication, *The Cliff Dwellers of the Mesa Verde*, Nordenskiöld wrote of how "strange and in the mysterious twilight of the cavern, and defying in



Gustaf
Nordenskiöld

their sheltered site the ravages of time, it resembles at a distance an enchanted castle." Among Nordenskiöld's important contributions were careful measurements and drawings, a recorded numbering system of the site's rooms, and fine black-and-white photographs.

Over the next decade, Cliff Palace became a popular destination for explorers and tourists. Some camped within its walls, removed



William Henry Jackson, one of the best known frontier photographers of the American West, made the first photograph of a cliff dwelling on Mesa Verde in 1874. It was of Two-Story House, located on Moccasin Mesa just outside the modern boundaries of Mesa Verde National Park. Jackson was working for the U.S. Geological Survey. With his colleague, William Henry Holmes, the two men opened the eyes of the world to the rich archeological treasures of Mesa Verde through their combined photographs and writings. Later, as a successful commercial photographer, Jackson sold prints of Mesa Verde, including this image of Cliff Palace, in his collection of western landscape photographs.

precious artifacts or damaged the site. Concerns for the protection of Cliff Palace and other archeological sites were raised by the Wetherills and others, and led to the establishment of Mesa Verde National Park in 1906.

In 1909, Jesse Walter Fewkes of the Smithsonian Institution excavated in the Cliff Palace alcove and repaired the crumbling walls. He thought the terraced architecture of Cliff Palace made it unique among the sites in Mesa Verde, and that the carefully worked, uniform stone blocks exemplified the "finest masonry known to any cliff dwelling." Fewkes divided the site into four parts: the Northern Quarter, Old Quarter, Plaza Quarter, and the Tower Quarter. He labeled many semi-subterranean structures as kivas and noted several milling rooms where stone grinding bins were still in place.

Although Fewkes wrote that the site was "almost completely rifled of its contents," he recovered whole pots; finely woven yucca sandals; wooden farming tools; a stone ax complete with handle; hatchets; arrow points; grinding stones; drills; seeds of corn, squash, pumpkin, beans, and gourds; and cloth made from feathers, yucca, and cotton. He also found stone balls that he surmised were used in a game or as weapons.

Through the years, more attempts have been made to reinforce and protect Cliff Palace.

Stabilization crews have reapplied mortar, replaced stones, repaired foundations, and tried to remedy water damage. In 1934, under the supervision of archeologist Earl Morris, Al Lancaster repaired and shored up walls in a Public Works Administration project. As part of that project, architect Stanley Morse completed a large, detailed map of Cliff Palace in pencil on linen. His map proved invaluable to later archeologists.

Around AD 1200, some of the people then living on Mesa Verde moved away from their mesa top fields and into the cliffs and alcoves, often re-occupying

Although much had been removed from Cliff Palace by 1906, Jesse Walter Fewkes found many important prehistoric artifacts.



Water seeping into the walls at the back of the alcove in 1995 led archeologists to undertake emergency work as soon as it was discovered. Their research has produced new interpretations of the architecture—and the meaning—of Cliff Palace. Through painstaking architectural study, park archeologists redefined what a "room" is at Cliff Palace and how certain rooms were used. Today's researchers believe Cliff Palace was more than a large village; they believe it included numerous public spaces and may have functioned as an important community or administrative center for the surrounding villages.

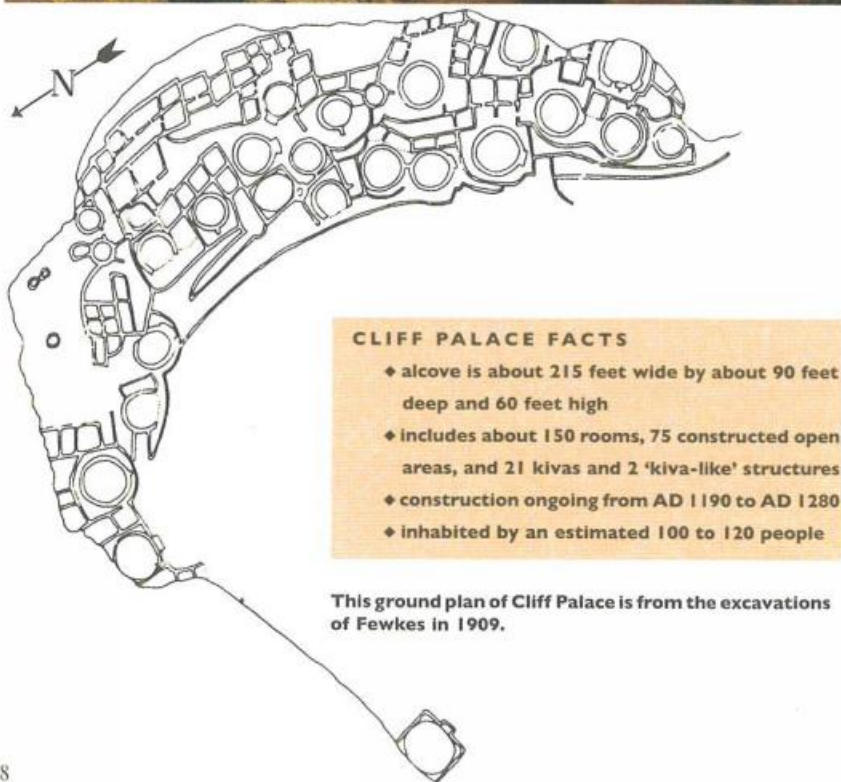
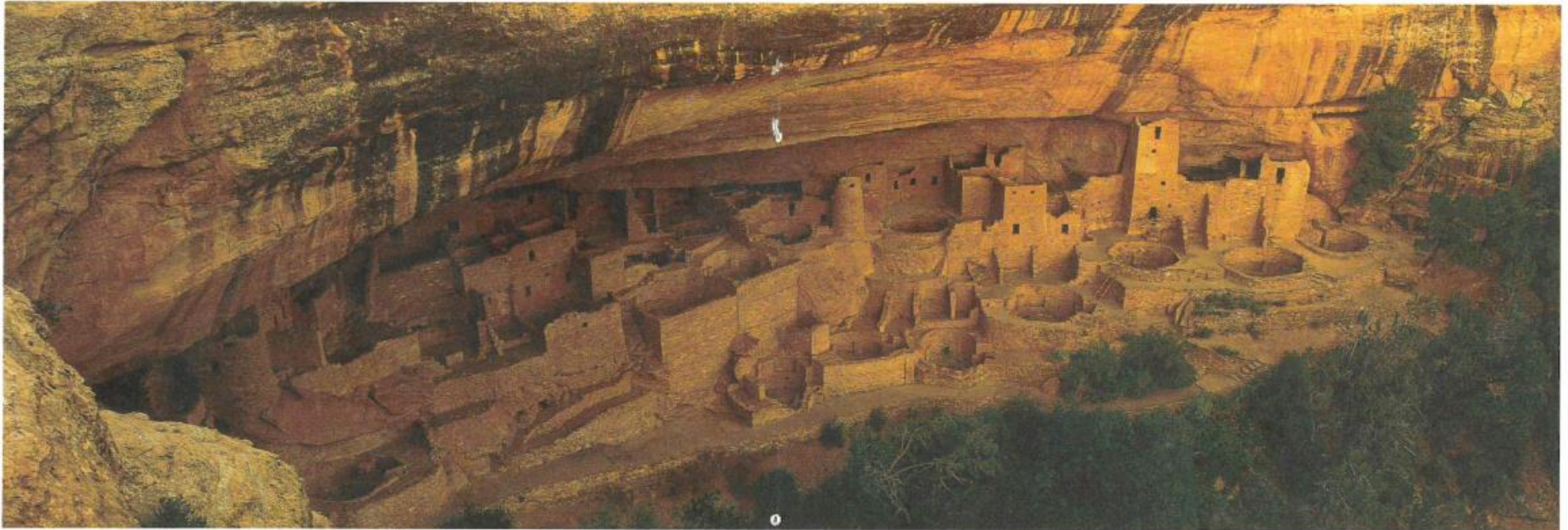


sites that had been inhabited by their ancestors 600 years earlier. This is probably the case with Cliff Palace, where archeologists find evidence of earlier buried structures.

The construction of Cliff Palace was a herculean effort, most of which occurred in the 20 years between AD 1260–1280. The basic raw materials—pieces of Cliff House Sandstone and the mortar ingredients—were abundant and available. Many of the building stones were shaped by hand, using harder quartzite hammer stones. Water had to be hauled in and mixed with sand, clay, and ash to make mortar. Gaps in the mortar were chinked with smaller stones. A thin coating of plaster, requiring more water, was then spread over many of the rock walls, inside and out. Although much has eroded away, some original plaster is still visible, with finger impressions where it was carefully smoothed on by hand. Sometimes plasters were colored: red, yellow, and white.

To create a level floor, the builders of Cliff Palace erected a retaining wall along the front of the alcove and backfilled behind the wall, making a flat working surface and solid foundation for rooms. About 150 rooms—living rooms, storage rooms, and special chambers, plus nearly 75 open spaces and 21 kivas—were eventually built.

Sometimes the builders incorporated immovable boulders into their rooms. During the 1934 stabilization of Cliff Palace, workers observed that one such very large boulder supporting a wall was cracking. They reinforced it with steel and concrete. While doing the work, they found that the original masons had similar concerns and had long ago tried to stabilize the same boulder.



Living Rooms

The presence of a hearth in a floor is considered a key marker of a living room, a room where families cooked, ate, slept, and engaged in daily life. At Cliff Palace, there are surprisingly few living rooms: only about 25 rooms include residential features like hearths. Each living room might have been used by three or four people in a household. This leads archeologists to estimate that about 100 to 120 people lived here.

Living rooms in this site measure about 6 feet by 8 feet, and ceilings are slightly less than 6 feet above the floor. Ventilation was not ideal, and the accumulation of soot and smoke from years of fires is readily apparent on ceilings. Family and clan relationships probably determined the layout of the rooms and the way certain rooms connected to one another.

You may notice T-shaped doorways here and in other Ancestral Puebloan villages in the Mesa Verde area. T-shaped and rectangular doorways tend to be small, perhaps to help make the rooms easier to cover for warmth and privacy. T-shaped doorways often seem to open onto a plaza or other shared public space.

Open Areas: Courtyards and Work Areas



T-shaped doorways are often seen in the Mesa Verde region.

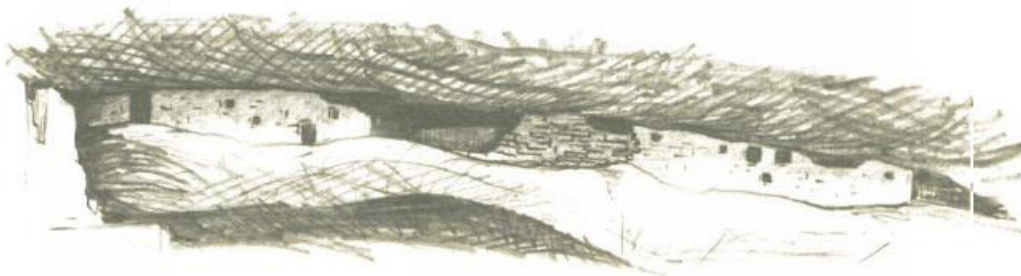
Open areas, those lacking roofs or completely enclosing walls, are common at Cliff Palace. They are courtyards, plazas, and rooftops, usually over kivas, where people probably gathered for social events. Clustered around each courtyard is at least one "suite" of connecting rooms, including one or more living rooms, storage rooms, and others used by a family. There were also smaller open areas where people did outdoor work—grinding meal or sharpening tools.

Storage Rooms

Researchers have identified two styles of doorways that help determine the use of two different types of storage rooms in Cliff Palace. In granaries, or store rooms used for food storage, the doorway was sealed from the outside with a tight-fitting flat stone. Other storage rooms, usually located next to kivas, were slightly larger than the granaries. They are thought to have been used to store non-food items, perhaps ceremonial goods.

Tucked up into the upper level of the alcove is a row of nine storage rooms used as granaries. These were intentionally placed up high where they were better sheltered from rain or snow. Cool, dry, and inaccessible, they held the surplus harvest that would feed the people through winter. People climbed wooden ladders to get up into them.

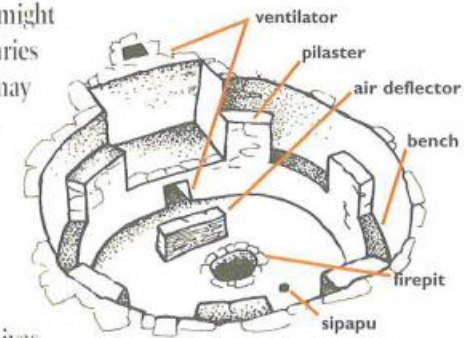
Nine granary rooms placed high up in Cliff Palace.



Kivas

Cliff Palace contains 21 large, circular, partly subterranean rooms that are interpreted as kivas, and 2 other structures that contain many of the features of kivas. The term *kiva* refers to similar rooms in the modern pueblos of Arizona and New Mexico where ceremonies and gatherings are held. In Cliff Palace, kivas may have been used for ceremonial or social gatherings, as well, but there are more kivas at Cliff Palace than at other sites, given the apparently low number of living rooms and residents here.

However, if Cliff Palace was an administrative or community center, as some scientists believe, then kivas might also have been used by visiting dignitaries or people from outlying clans. Kivas may also have served as work and weaving rooms, or even as living quarters at times. Alcove sites like Cliff Palace can be frigid in winter, but kivas, with fires inside, would have been warm and protected from the wind.



Throughout Mesa Verde most kivas followed the same plan. Six upright stone pillars, called pilasters, supported the roof, and a shallow banquette encircled the room. There is a firepit in the center of the floor, flanked by a deflector, a ventilator opening, and a chimney-like shaft that drew in fresh air from outside. Most of the kivas in Mesa Verde also have a small hole in the floor, situated between the firepit and the outer wall, called a *sipapu*. A *sipapu* is a ritual feature that may symbolize the entryway where people emerged from an earlier world into our present world.

A tunnel connects two kivas in the south end of the Cliff Palace alcove, and another tunnel leads from a kiva into a room. Tunnels leading to or from kivas are not uncommon in Ancestral Puebloan sites. Perhaps they allowed someone to make a sudden, theatrical entrance into the kiva.

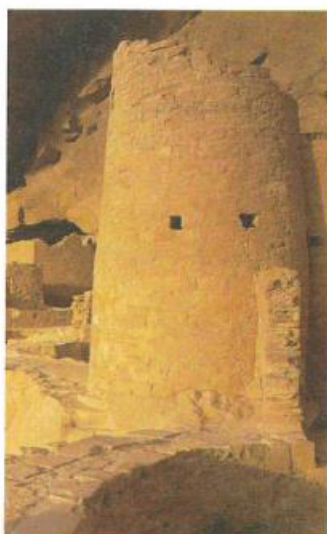
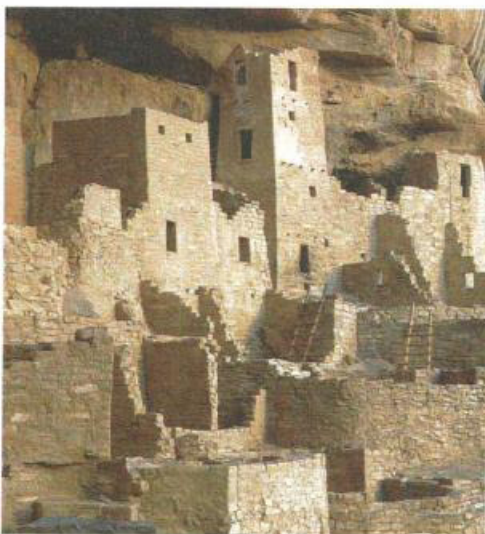
One kiva at Cliff Palace is especially intriguing for the hints it gives about social organization in Ancestral Puebloan society. The kiva is located

in the center of Cliff Palace at the point where a series of doorless walls partition the pueblo into two parts. In ancient times, this kiva's interior walls were coated with plaster of one color on one side, and in another color on the other side. Some archeologists think this suggests the existence of two groups or societies, called moieties, at Cliff Palace, as at some pueblos today. The kiva's central position and the two plaster colors may indicate that this kiva integrated the two societies.

Towers

Some of the finest masonry in Cliff Palace appears in multistory square or round structures now called 'towers.' Some towers were built as free-standing structures, but others were surrounded by roofs, walls, and other rooms. An especially outstanding tower rises almost from floor to ceiling and has a T-shaped doorway in the topmost level. When the Ancestral Pueblo people lived and gathered here, there would have been roofs, rooms, and walls surrounding this tower, and the T-shaped doorway would likely have opened onto a rooftop plaza.

Both square and round styles of tower structures are found in the Cliff Palace complex.



Beams

Original beams and painted plaster can still be seen in the four-story structure at the south end of Cliff Palace.

The original wooden timbers in some rooms have proved extremely valuable in providing dates for when Cliff Palace was built, remodeled, and expanded over time. The annual growth rings in the wood indicate that construction spanned AD 1209 through at least AD 1280, and a few tree-ring dates show construction as early as 1190–1191. During the main building phase—from 1260 to 1280—the residents of Cliff Palace apparently were almost constantly building, expanding, remodeling, or performing home maintenance.

Access

While visitors today enter Cliff Palace by a convenient stairway, the original residents descended from the mesa top by means of hand-and-toe holds carved into the sandstone cliff. You can see hand-and-toe holds in the rock face as you climb the modern trail that leaves the site. Ladders were in common use, and carved stairs were not unknown. However, traveling from alcove to mesa top to canyon bottoms and back again meant that people of all ages routinely used hand-and-toehold trails. Although Cliff Palace now

seems somewhat isolated, in the mid to late 1200s it was the center of a thriving, active community. There were hundreds of houses in cliffside alcoves and on the nearby mesas. People were constantly walking and climbing to tend their mesa-top fields, to bring in food and water, and to visit neighbors.

Why did the ancient people build Cliff Palace? If the site was an administrative or community center it might equate with today's capitol cities, which often include expensive public architecture and large public spaces. The 100-120 residents may have been 'caretakers' who performed maintenance, helped distribute the stored crops, and helped coordinate special events when hundreds of people from outlying communities travelled to Cliff Palace.

Like Balcony House, Long House, and the other alcove communities, Cliff Palace was one of the last sites to be built and occupied in Mesa Verde. From about AD 550 until about AD 1200, most people chose to live on the

mesa tops near their fields, living first in pithouses and later, in pueblos. You can visit these older settlements along the Mesa Top Drive and at Far View.

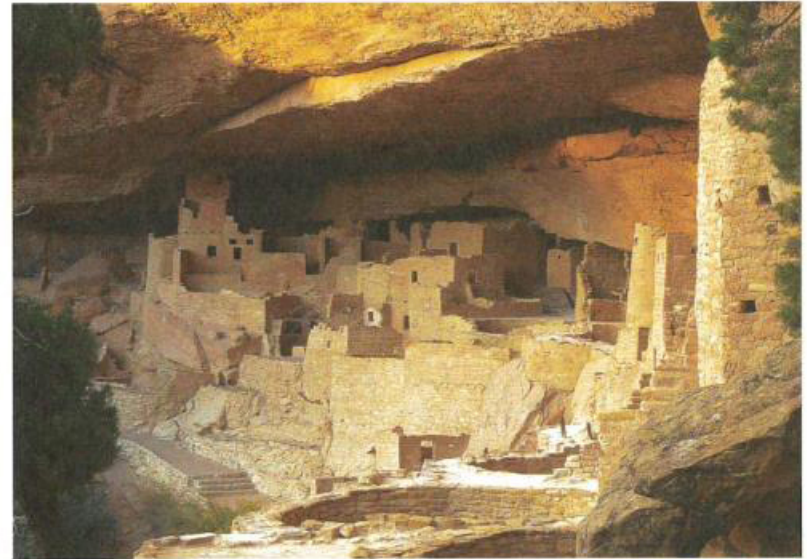
Archeologists have identified about 5000 Ancestral Puebloan sites at Mesa Verde. Only

about 600 of those are cliff dwellings. These beautiful, carefully built ancient villages raise many broader questions—mostly still unanswerable—for

modern observers. Why did so many people move into the alcoves after AD 1200? Why did they build and maintain these elaborate structures? Was it for protection? If so, from what? Were they attracted by the flowing springs in



The Hopi village of Walpi, seen here in 1897, suggests ties with Mesa Verde cliff dwellings.



some of the alcoves? Not every alcove where they built includes a spring, but some do. Were farmers desperate for every square inch of land they could plant on the mesa tops, and so moved down into the alcoves?

By AD 1300, most of the people who had made the Four Corners region the center of Ancestral Puebloan culture for centuries had moved on. Insights into their decisions to move away come from numerous sources. The tree ring record shows a long drought at the end of the 1200s, when crops would have shriveled and springs would have dried up. The numbers of sites and artifacts indicate that populations had been on the rise for generations. Evidence from ancient trash middens implies that people were eating fewer large animals and more small animals at that time. Some archeologists find evidence for increasing social conflict, perhaps as environmental pressures grew.

Whatever the combination of environmental and social stresses that led them to leave this area, they took many of their traditions, architectural skills, and artistic styles to their new homes. By all evidence, their descendants are 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. For many of today's pueblo people, Cliff Palace and Mesa Verde are special places, the homes of their ancestors.

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 over 4,500 known 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 Rose Houk. Special thanks to Julie Bell and Patricia Lacey.

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