Surveyors Map a Cliff-dweller Ghost Town Abandoned 700 Years Ago

This team, part of a National Geographic Society–National Park Service archeological project, explores Long House, one of the 13th-century Indian cliff ruins at Wetherill Mesa in Mesa Verde National Park, Colorado. Ledges in the 100-foot-high vault gave the owners an impregnable refuge against marauders. Rain water streaked the roof.

The National Geographic Society and the National Park Service probe the mystery of Wetherill Mesa

SEARCHING FOR

Cliff Dwellers' Secrets

By CARROLL A. BURROUGHS

Staff Archeologist, National Park Service

NOT since their Pueblo Indian builders disappeared so mysteriously nearly seven centuries ago have the high-perched cliff homes of Wetherill Mesa seen so much determined energy.

In this remote corner of southwestern Colorado's 80-square-mile Mesa Verde National Park, scientists seek the answers to a whole series of riddles. Here in action is the National Park Service–National Geographic Society Wetherill Mesa Project, its first year of operations just completed.

Ruins Long Silent Hum With Activity

Over a trail passable only in good weather, I visited Long House camp, named for the first of the major Wetherill Mesa cliff dwellings to be examined in this project.

Amid the bustle it was easy to understand why the area has been closed to the public until the work is complete. This is purely and simply a working camp intent on two aims: To increase our knowledge of Wetherill Mesa's history and to prepare it as an alternate attraction for the swelling tide of visitors to the park, which is literally wearing out the ruins at near-by Chapin Mesa (map, page 622).

At the lip of the awesome cliff overhanging Long House (page 623), a sweating Navajo crewman strained at the hand winch of a crane jutting into space. Pulleys squealed as he lowered cement to archeologist James Allen Lancaster's stabilization crew. Their job was to rehabilitate the crumbled ruin nestled in the cliffside. Below, in the ruin itself, other crewmen carefully stacked stones, once part of the original dwellings, now to be used again in the stabilized walls.

His arm waving wildly, a surveyor squinted through his transit at a distant marker. Long House was being mapped topographically and architecturally, I learned after a dusty, breath-stopping scramble down the steep path leading from the mesa top.

Here in the great cave nature carved into the cliff, rooms deserted for centuries echoed to the trowels and shovels of excavating crews. Often there was a triumphant yell as the sieved earth gave up a bit of pottery, a hunter's snare, or some other relic.

On the steep slope beneath the eastern end of Long House fresh trenches probed the massive trash heap piled up by the original residents. Already this slope has yielded a number of burial sites, and supervisory archeologist Douglas Osborne has noted a number of trends in burial methods. Such discoveries will provide new clues to the customs of the people who once lived here, and may help link them historically with present Southwestern Pueblo Indian tribes.

Everywhere there was tense, purposeful activity. No one could be sure what the next spadeful of earth would uncover; what these debris-filled rooms would tell us of the fate of their vanished builders—and why they came to these cave shelters from the mesa top.

Moving Day Came Often for Indians

These were some of the questions Al Lancaster and I pondered after a hearty camp supper. The broad mesa lay around us, slashed irregularly by the rugged canyons. Al gestured toward the south.

"From about A.D. 600 to 1100," he said, "most of the Mesa Verde Indians lived in small farming villages scattered over the lower elevations of the mesa top. Then gradually, during the 12th century, the smaller villages were deserted. More and more of the people moved into large, compact communities higher on the mesa top. More easily defended, true, but less productive for a farming people. Why did they do it?"

Some new influence was at work, but what was it? The sequel is just as puzzling.

About A.D. 1200 the mesa-top communities were abandoned as the Indians moved again,

this time into caves in the canyon walls. The building problems must have been enormous. Just to terrace some of the steeply pitched cave floors must have taken as much work as building a good-sized village on the mesa top.

More than 800 cave and ledge ruins have been found in the park. Yet this prodigious investment of time and labor was abandoned within the century. By the year 1300 the Indians of the Mesa Verde had moved again—this time right off the pages of history.

Indian Gave Clue to Discovery

Was this final move compelled solely by the drought at the end of the 13th century, or was there also the threat of some unknown enemy? And what happened to the people of the Mesa Verde afterward?

"Maybe what we're doing here will help relate the Mesa Verde people to some other Pueblo tribe and bring them back from oblivion," Al suggested. "They deserve it. They built well." So well, he added, that despite the ravages of six and a half centuries, the Mesa Verde ruins were still impressive when the first white men discovered them. The discoverers were the five Wetherill brothers—Richard, John, Alfred, Clayton, and Winslow—and their brother-in-law, Charlie Mason, all members of a near-by ranching family.

A friendly Ute Indian named Acowitz had told them of a huge cliff village in one of the canyons north of the Mancos River. They finally found it in December, 1888, while chasing stray cattle.

The discoverers and their successors exploited their trove in the fashion of the day, and for years thereafter the Mesa Verde was systematically looted of its treasures. Don Watson, long-time park archeologist at Mesa Verde,* and one who knows the details best, tells the story:

"The work of some of the diggers was careless and ruthless. They had no consideration for the ruins; their only thought was of the sales value of the artifacts recovered. A banker in a near-by town even grub-staked men to dig in the ruins in return for a share of the profits."

Then reaction set in, notably supported by the Colorado Cliff Dwelling Association. Finally, on June 29, 1906, Congress passed a bill creating Mesa Verde National Park.

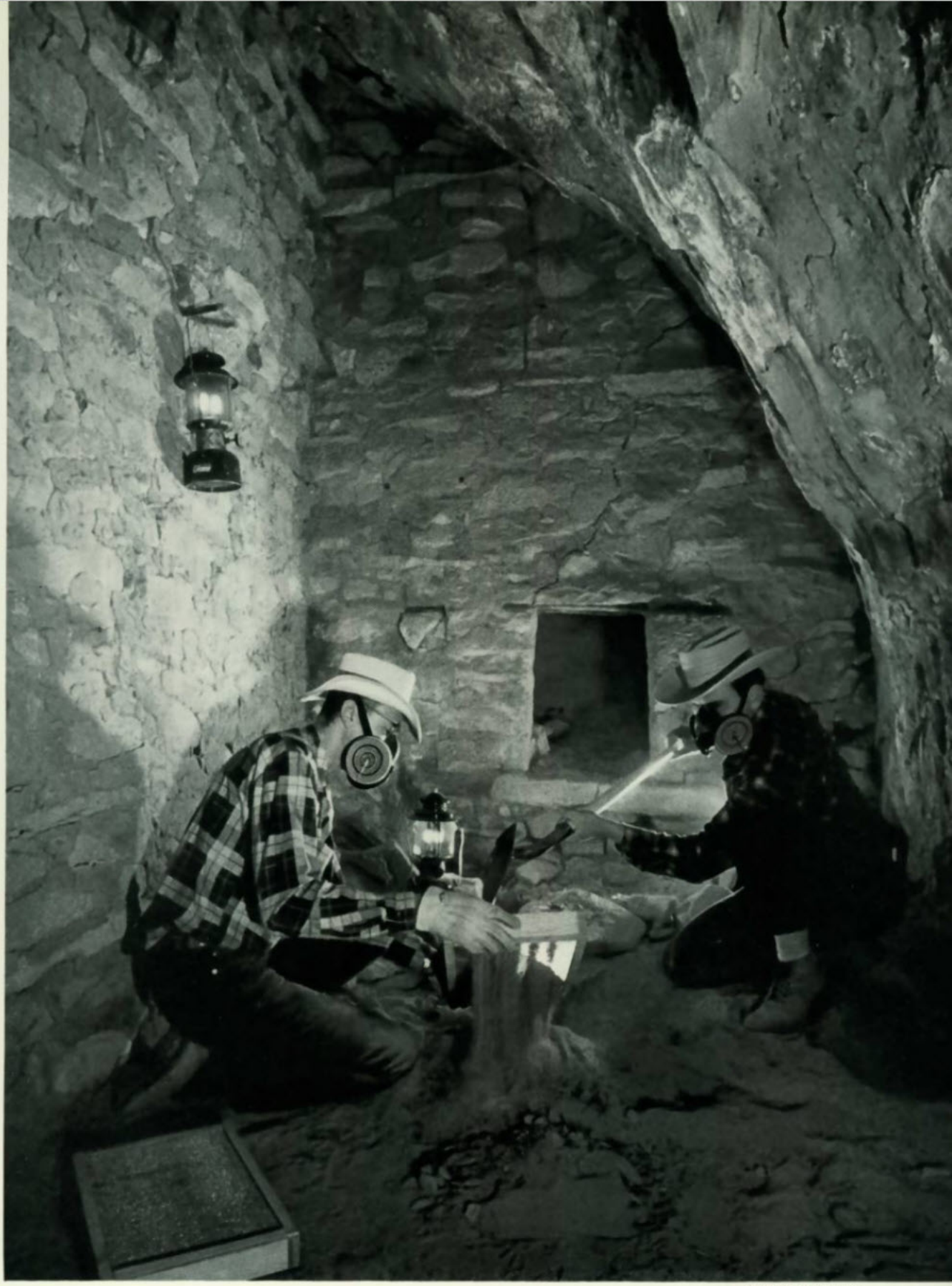
In the years before it became a national park, only one archeologist had done scientific excavation in the area. This was Sweden's Baron Gustav Nordenskiöld, who dug into several of the cliff ruins in 1891.

* See "Ancient Cliff Dwellers of Mesa Verde," by Don Watson, NATIONAL GEOGRAPHIC, September, 1948.

Scientists Examine an Ancient Snare

Cliff dwellers had turkeys, but raised no other meat. They hunted steadily to supplement their diet of corn, beans, and squash. Trappers set snares of braided yucca fiber. A web of cords bagged the struggling victim when the noose drew tight.

Dr. Douglas Osborne, supervisory archeologist of the Wetherill Mesa Project, and Mrs. Jean M. Pinkley, Mesa Verde National Park archeologist, study this perfectly preserved snare. Found in a cliff ruin, it is now in the park museum.



WILLIAM BELKNAP, JR.

Masked Against Dust, Archeologists Sift Bits of Crumbled History

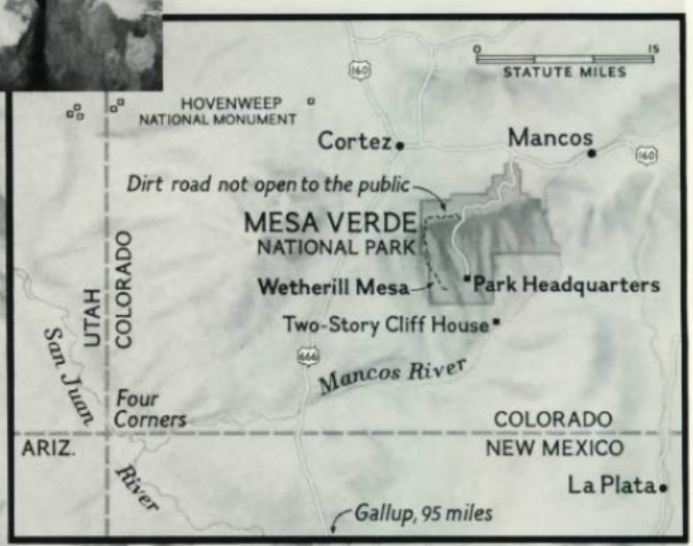
Pouring earth through wire screens, the men search a room in Long House. Pueblo masons formed the chamber by joining sandstone-and-adobe walls to the arch of the cave.

Cliff Dwellers' Caves Gape in the Mesa

This aerial view of Wetherill Mesa shows two of the park's 800-odd cliff communities. Long House, its huge stone portico suggesting the stage of an amphitheater, rises amid a carpet of juniper and piñon. A second cave village, Site 1249, shows on the left. Distant slopes reveal the scars of fire.

Mapping by radio, Alden C. Hayes, archeologist in charge of the National Park Service site survey, focuses his direction-finding antenna on a beacon in order to calculate his position.

For the scientific excavation and study of cliff dwellings on Wetherill Mesa, the National Park Service asked and received the National Geographic Society's support.



Nordenskiöld's report of 1893 contained excellent descriptions, maps, and photographs. After his death, his collection of about 600 pieces was purchased by a Finnish industrialist—which explains why some of the finest Mesa Verde artifacts are now in the National Museum in Helsinki, Finland.

Among the baron's finds were several coils of two-strand cord, woven from yucca fiber, some as long as 1,300 feet. Their use remains uncertain. Perhaps, when plaited into heavier rope, they aided the cliff dwellers in raising and lowering objects to and from the mesa top. Or they simply may have been stockpiles for use in making hunting snares and for trading with other Indians.

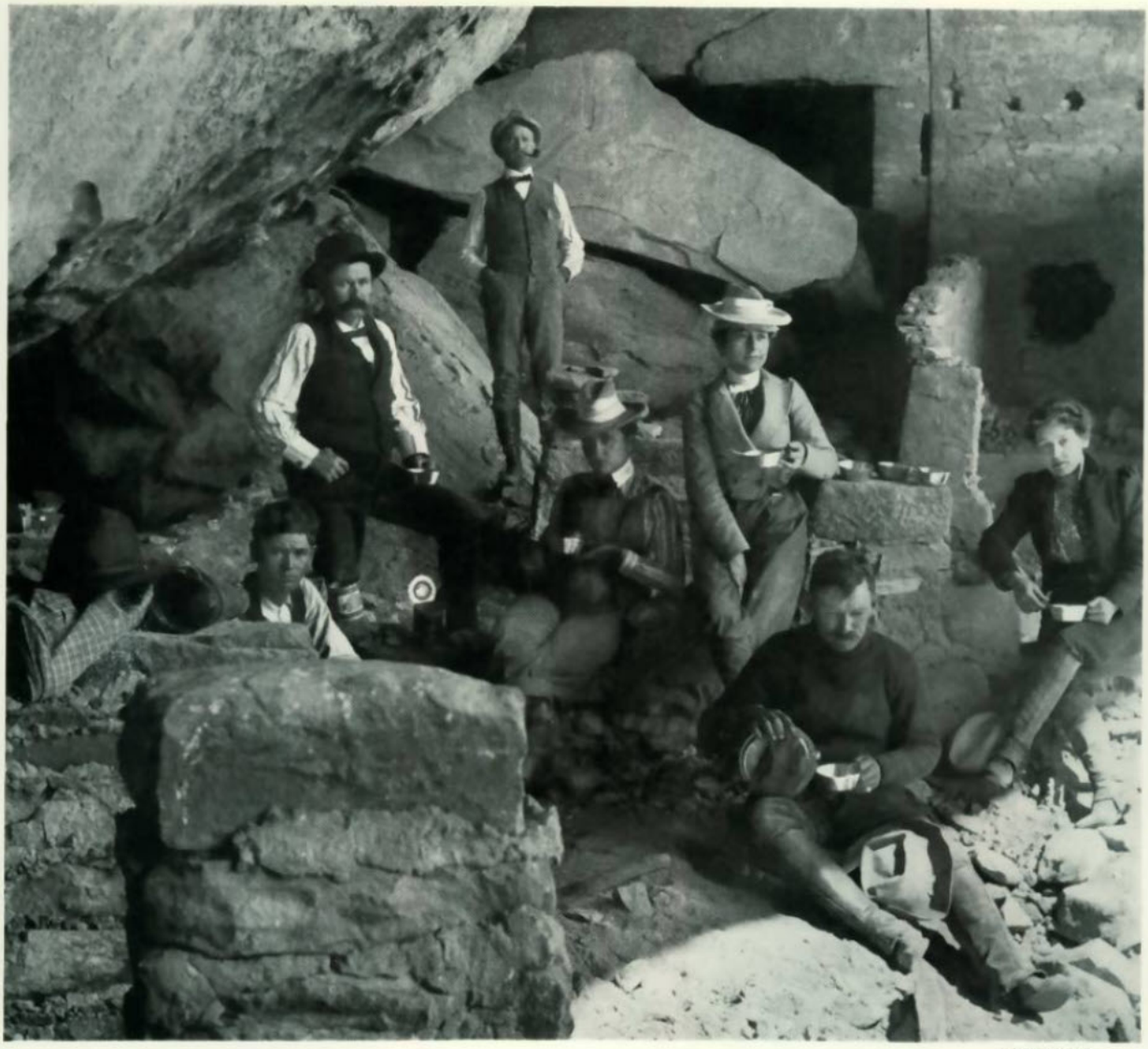
Dr. Jesse Walter Fewkes, of the Smithsonian Institution, worked from 1908 through 1922 clearing debris from large cliff ruins and mesa-top villages, and strengthening and bracing weakened walls and foundations. After that, park development and management took precedence and scientific research was sporadic. Then, in 1958, the National Park Service and the National Geographic Society launched their joint Wetherill Mesa archeological project.

"In our excavations," Dr. Osborne told me, "we will search for even earlier people—the ancestors of the mesa-top village builders of the A.D. 600-1100 period, who may have occupied the caves as makeshift shelters. And in the excavation of the large cliff ruins we should be able to produce a better idea of com-

First Visitors Relax on the Porch of Two-Story Cliff House

Intrigued by rumors of mysterious ruins, W. H. Jackson, photographer for a Government survey team, decided to explore the Mesa Verde in 1874. Hiring a garrulous miner as guide, he led a party into the tableland. Just as they were losing faith in their guide, the men spotted a stone house clinging to the canyon wall 700 feet above the Mancos River. Next morning, September 10, Mr. Jackson scrambled up to the ruin and took this historic photograph, first ever made of Mesa Verde cliff dwellings.

WILLIAM H. JACKSON, COURTESY DENVER PUBLIC LIBRARY



HENRY MOORE

Canteens Refresh an Early Scouting Party at Cliff Palace

Scientists believe lack of water may have driven the cliff dwellers from their homes nearly seven centuries ago. Among the handful of Anglo-Americans to view the ruins around the turn of the century, these visitors packed in on horseback. Today more than 200,000 sightseers a year visit Mesa Verde National Park over modern highways.

Solid rock forms the top of the square opening in the background. Small holes held log roof beams, long since rotted away. The photographer caught this scene on a cumbersome glass plate, a forerunner of modern film.

munity life during the climax period of the 13th century.

"Studies of pollen and soil will show the manner and extent of the cliff dweller's agriculture. Examination of tree rings will tell how these were affected by changes in climate."

Project May Take Six Years

"From all this," Dr. Osborne summed up, "we may finally be able to understand why these people scurried about so during the last two centuries of their occupation, why they left the Mesa Verde, and what happened to them."

In addition to the work at Long House, two other cliff dwellings are scheduled for attention. Next to be excavated will be Step House and Mug House, so called for the pottery the Wetherills found in it.

The whole job will probably take five or six years. Evaluating the findings will undoubtedly take even longer.

Meantime, the vast canyons will continue to echo the sounds of 20th-century science at work as the past yields its secrets to modern techniques, and an almost lost way of life emerges from the shadows.