

A T R A I L G U I D E T O

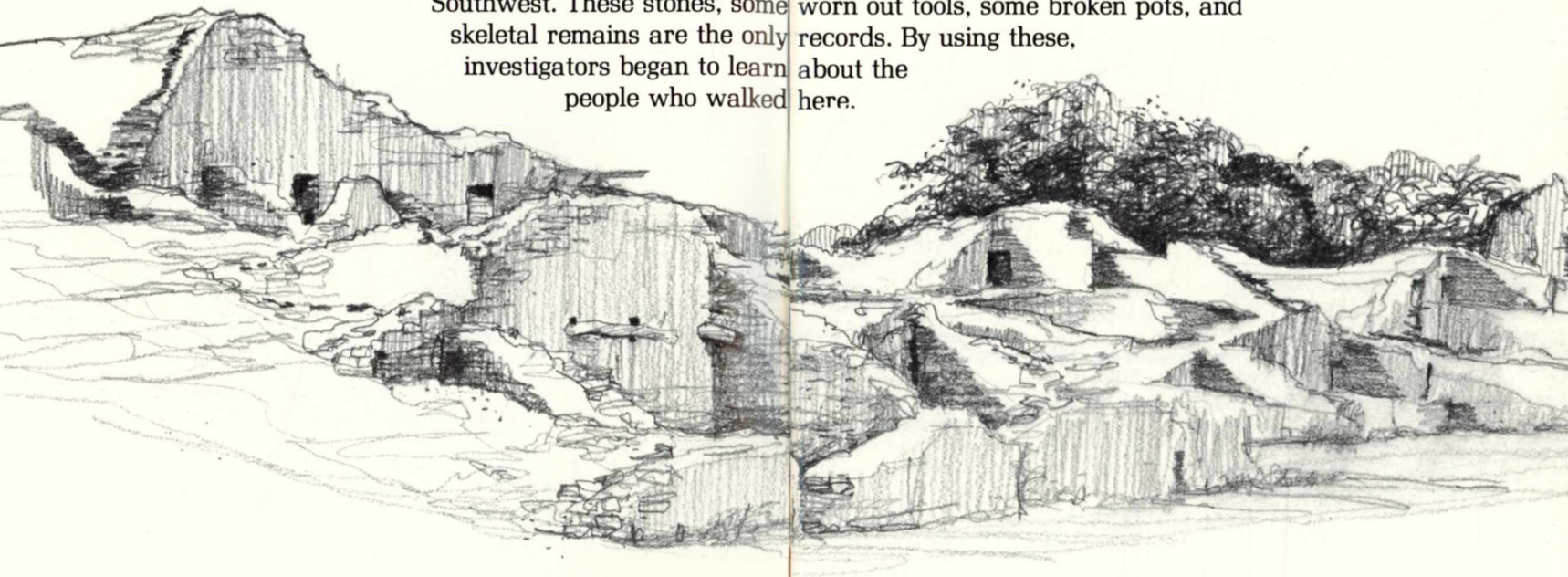


AZTEC RUINS

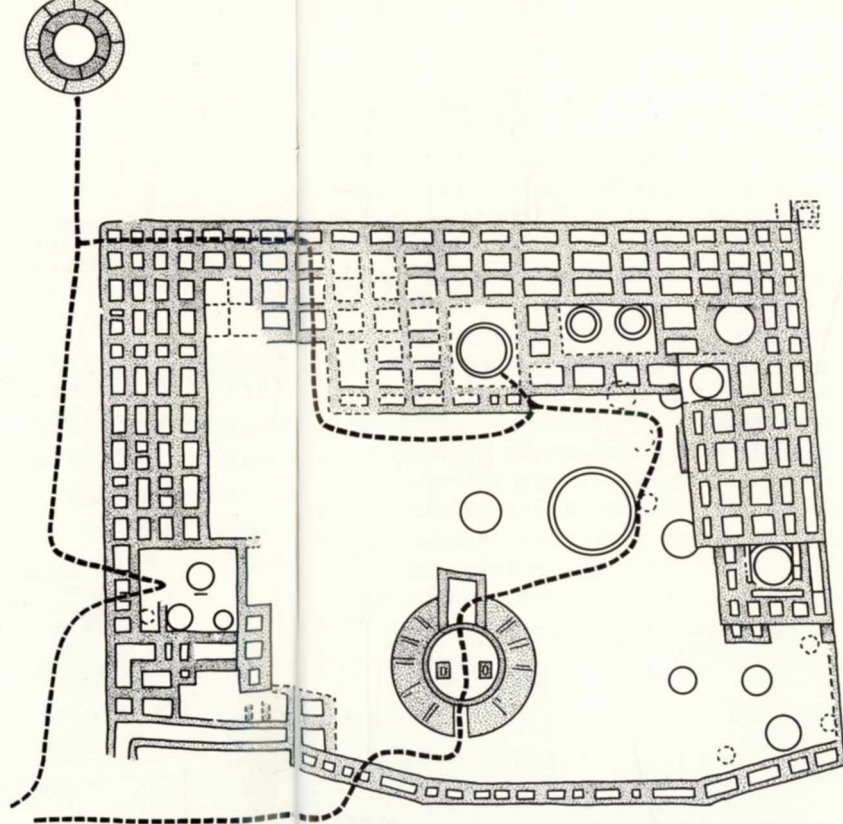
N A T I O N A L M O N U M E N T

YOU ARE ABOUT TO ENTER AZTEC RUINS

(A.D. 1100 to 1300), one of the major towns of the prehistoric American Southwest. These stones, some worn out tools, some broken pots, and skeletal remains are the only records. By using these, investigators began to learn about the people who walked here.



THE TRAIL



Aztec Ruins National Monument,
New Mexico was established in 1923
and covers 27 acres (11 hectares).

Description of trail

Length — 400 yards (360 meters)
Time required — 30-40 minutes
Terrain — slightly graded

Rules

Climbing on walls is prohibited. Children
should stay with persons responsible
for their safety. No collecting of
natural or cultural material is allowed.

Warnings

Stay on trail. Several places on the
trail have steps and low overheads.
Please be careful.

How to use this Guide

Numbered stops along the trail cor-
respond to numbered stops in the
trail guide.

Aztec is one of the largest pre-
Spanish towns in the Southwest.
Early American settlers in the region
erroneously assumed the ancient
builders were Aztecs, hence the

name of the ruins and of the modern
town of Aztec.

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Bill Schart

We suspect the most important reason they chose this spot was the nearness of the Animas River. It was the lifeblood of the pueblo, providing water for domestic use and for irrigation. Since this area is semi-arid—only 10 inches (25 centimeters) of rain per year — irrigation and floodplain farming always have been necessary.

Although the people were basically farmers, they also gathered wild plants and hunted deer, elk, bighorn sheep, antelope, and a variety of smaller animals. Numerous species of migratory waterfowl visit to this day. Summer temperatures range from the 40°s to the upper 90°s (4.4° to 32.2° Celsius) and the season is long enough to grow corn. Winters, on the other hand, can be harsh with snow and ice and sub-zero weather.

AZTEC AND ANASAZI

No Aztec Indians ever lived in Aztec Ruins! The

ruins and town received its name from early American settlers who surmised that only the famous Aztec Empire in Mexico could have created them. This town was built by Anasazi people. About the time Christ was born, a people who had been nomadic slowly began to group together to live in villages and to cultivate crops; they became the Anasazi. In time they became expert farmers, architects, and ceramicists producing a wide variety of fine crafts and enjoying trading links extending east

to the Rio Grande, south into Mexico, and west to the Gulf of California, growing in population and influence to become a major culture of this desert region.

This village was deserted about 1300 for reasons we will discuss at the last stop. In the 1800s settlers came along the Animas River and found these ruins. Unexcavated, they were mounds overgrown with vegetation, and occasional fragments of standing wall.

Aztec Ruin has multi-storied roomblocks surround-

ing a central plaza. The nearest parallel to a community such as this in present day society might be the urban apartment house or condominium. The pueblo covered something less than two football fields and contained about 500 rooms. Not all were in use at the same time. Some were in disrepair, repositories for trash or totally abandoned. This, along with uncertainty about the relationship between number of rooms and population, has made it difficult to estimate how many people lived at



Aztec. Estimates range from 400 to 700 people.

As Anasazi culture developed regional differences occurred. This pueblo experienced two separate occupations by different, though closely related, Pueblo peoples. It was deserted for about 25 years between occupations.

The original builders of Aztec were either from, or closely related to people from Chaco Canyon, 50 miles (80 kilometers) south. The Anasazi population peaked at Chaco Canyon in the early 1000s and 1100s. The dozen or so major towns in Chaco Canyon constituted the center or "capital" of a much larger network of related communities we call "outliers." Aztec is one of the outliers that the Chacoan people began constructing about A.D. 1110. Salmon Ruins, 10 miles (16 kilometers) south at Bloomfield was another, and over 70 more such sites have been found within a 100 mile (160 kilometer) radius of Chaco Canyon.

Chacoan outliers and the

nature of their relationship to the towns of Chaco Canyon is the subject of much modern archeological research and discussion. One important factor was a network of roads linking the far-flung communities with Chaco Canyon. Although not visible today near Aztec, one of the principle roads from Chaco Canyon led directly toward Aztec.

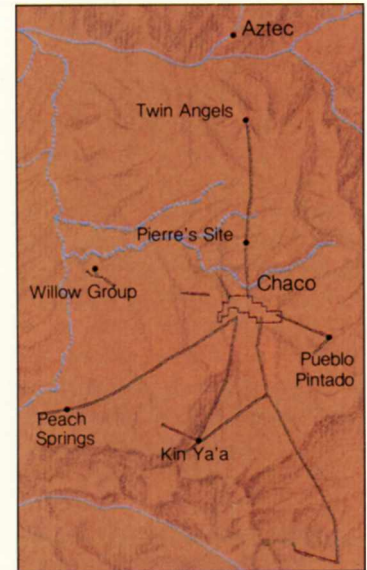
The Chacoan occupation of Aztec lasted perhaps five generations, until about A.D. 1200. Then, about A.D. 1225, a second group of Pueblo people, this time with ties to Mesa Verde, reoccupied the site. Some existing structures were renovated and rooms were added. Mesa Verde, about 40 straight-line miles (64 kilometers) northwest of

ROADS *have been discovered by archeologists that seem to connect the large community of Chaco Canyon to neighboring population*

Aztec, was inhabited by the Anasazi from the late 500s to the late 1200s. Between A.D. 1100 and 1300 Mesa Verde blossomed and during that time some Mesa Verdians showed up at this abandoned town on the Animas River. The new culture was basically similar to that of Chaco Canyon, but distinctive in architectural style and pottery; like the archeologist, you will have little trouble recognizing the parts of this pueblo that were built or lived in by the Mesa Verdians.

You can see what ruins look like before the archeologist begins work. Look across the plaza, perhaps 150 yards (137 meters) beyond, to the brush-covered mounds by the cottonwood trees. The

area is closed to visitation. Although it has been tested by archeologists, it has not been excavated or prepared for public viewing.



centers like Aztec. Archeologists, in recent years, have studied this extensive road network utilizing remote sensing (analysis of aerial photography).

Small ruins along the roads may suggest way stations, communications centers or construction camps.

1 In front of you is a small kiva. "Kiva" is a Hopi term signifying a chamber, usually underground and circular, used by Pueblo people in connection with religious ceremonies and other special activities. They are used mostly, but not exclusively, by males.

Kivas are entered by a roof hatch that also serves as an escape hole for smoke from a central hearth. Fresh air is drawn in by a ventilator shaft. Participants usually sit around the walls on benches. In many kivas the most sacred feature is a small hole in the floor called the "sipapu." It represents an original hole or passage-way through which, in the dim past, all animal and human life emerged. They

SANDSTONE

shaping and inlaying the green band along this wall indicate a high degree of craftsmanship.

are rare here at Aztec. Their absence may be a cultural variation of the people who lived here, or perhaps accidents of time eliminated the remains.

2 Skirting the 278 foot (85 meter) west wall of the pueblo, you have probably noticed exterior doors are rare. The pueblo was entered by one of the few doors, or by retractable ladders. Since the exterior roomblocks reached a height of three stories, with few openings, they were easily defensible against potential invaders.

The pueblo was constructed of sandstone blocks carried here by hand from quarries at least a mile away. The stones were broken out with stone hammers

and wedges, shaped and dressed with pecking stones. The horizontal band of green stone was probably for decoration. The small low windows provided ventilation and light to the outer ground floor rooms, which were entered by roof hatches. The timbers visible in the wall are original.

3 Looking down this wall to your right, you see the entire 360 foot (110 meter) length of the back of Aztec Pueblo. The large rectangular layout of the pueblo, with low south walls and high north walls, helped collect the sun's rays and warm the pueblo.

Please continue along this trail to the Hubbard Site.



4 This is the Hubbard Site, named for a settler who once owned the ruin. Gordon Vivian excavated it in 1953 for the National Park Service. It was backfilled in 1979 to halt deterioration of the walls. It is one of the few

tri-walled structures in the Southwest. Archeologists generally agree it was used in connection with religious rituals, or may represent the appearance of a new cult that never developed further.

The ruin, 64 feet

(19 meters) across, consists of three concentric circular walls. The spaces between the outer two rings were partitioned into a series of small rooms, eight in the inner ring, fourteen in the outer. Most compartments were accessible only by hatchways. The central circular space was a kiva.

Another tri-walled structure, unexcavated, is among those mounds by the cottonwoods northeast of the main ruin. This is the only place known with two such structures so close together and only one other, at Pueblo del Arroyo in Chaco Canyon, is easily accessible to view.

5 This doorway is modern, not original, and is part of the checkered history of

Aztec Ruins. In the 1880s ruins were seen as a handy source of souvenirs rather than knowledge. The loss here, and throughout the Southwest, has been great. Holes broken through walls in the course of pot hunting were later modified into doorways. The contents of these rooms were taken by the discoverers, leaving the rest of us to wonder what they contained.

6 The doorway to your right is original and provided the only entrance to the next room. Doorways were small and had high sills to cut down on drafts and conserve heat. As the small vents in the wall ahead will testify, air circulation was a problem in ground floor rooms.



THE HUBBARD SITE is a famous kiva because of a unique feature. The kiva has three concentric circular walls instead of one. The brown lines are the tri-walled kiva; the black areas are earlier structures.

7 This ceiling has widely spaced heavy pine beams set into solid masonry walls providing support for the next story. These timbers were probably carried by hand from mountains 20 miles (32 kilometers) to the north. The overlying cottonwood poles were local and supported a layer of split juniper and juniper bark. This matting, in turn, was the base for a six to eight inch (15 to 20 centimeter) layer of clay, which formed the floor for the upper story.

Archeological investigation by Earl Morris in 1918 revealed this room had different uses over the years. Initially it was a residential or storage room. Later it became a trash repository, accumulating several feet of refuse. Then for a period it was used to pen turkeys, as evidenced by a layer of turkey dung overlying the refuse. Finally, the room became a tomb — Morris excavated ten burials here.

8 Three doorways here are open and one has been

sealed. The fourth doorway was sealed at some point during the pueblo's occupation for reasons we can only guess; today we would call it remodeling.

9 This room was sealed sometime prior to A.D. 1300. In 1881 local residents broke in and found 13 skeletons lying on the floor in the customary flexed burial position. It was not uncommon for a residential or storage room later to be used as a tomb. Burials were found under floors of unused rooms, beneath plazas, in refuse mounds, or, as in this case, in an abandoned sealed room. These customs implied no disrespect for the dead, only a differing tradition.

Note the smoke-blackened ceiling. Each suite of rooms had a small firepit for heating and cooking. Since there were no chimneys, smoke and soot collected on the roof beams and discolored them. Other rooms in this section did not contain firepits, and the ceilings are

contrastingly light in color. These may have been used for storage, rather than for living.

10 Across the closed door to the right is an original mat, or blind, of willows sewn together with yucca cord. Mats were used as door coverings, in ceiling construction and for burials. Here there was a need to reduce the size of the doorway, so they erected a framework of small poles and placed the mat above to hold mud plaster. The mat has survived centuries with relatively little deterioration.



11 Small stones chinked between larger, shaped sandstone blocks is an earmark of Chacoan masonry.

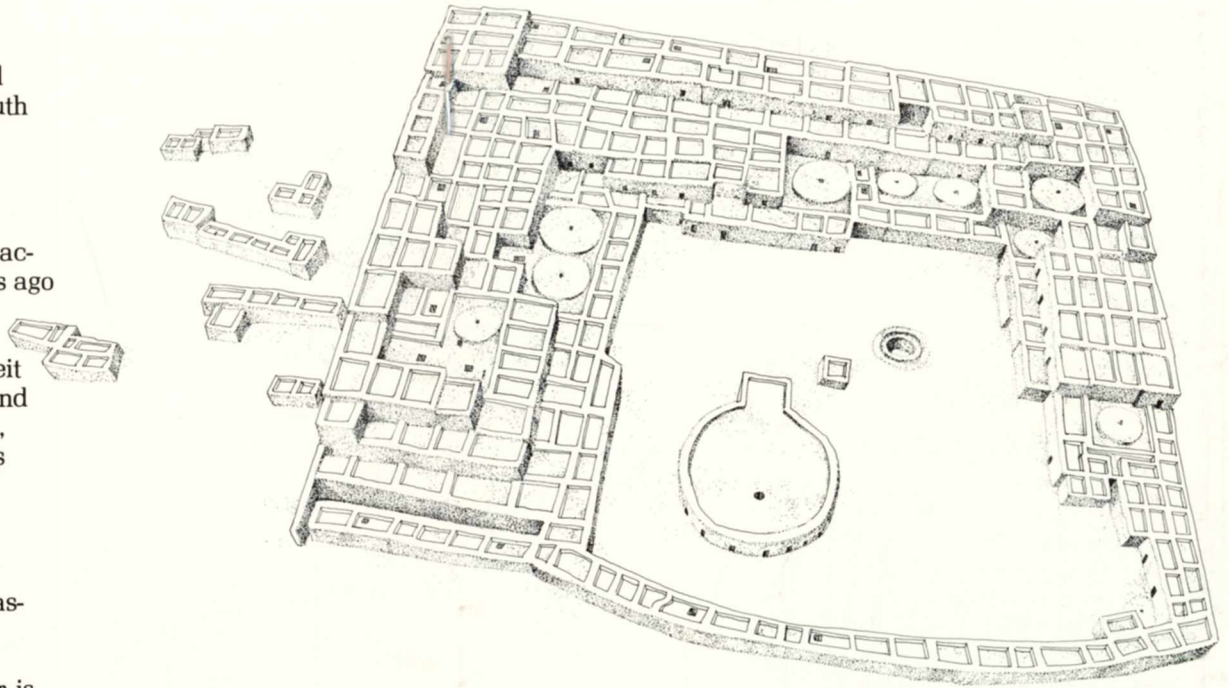
In 1927, when the room was converted for use as a museum, the floor was cemented. Since discovery, Aztec Ruins have changed considerably, first as a result of vandalism and subsequently through archeological excavation, stabilization, reconstruction, and new construction. Part of the Visitor Center, for example, was originally the private residence of archeologist Earl Morris.

12 You are standing in one of the tallest sections of the pueblo, where some walls reached nearly 30 feet (9 meters) above their foundation. Here, as at other prehistoric pueblos, high walls were built thick at the base and tapered as they rose to upper-story levels. This engineering provided strength and stability while avoiding unnecessary weight.

Beam butts in the walls indicate support for upper

floors, and the ledge visible at about the eight foot (2.4 meter) level is evidence of what used to be the second story floor. Holes in the south wall also were for support timbers.

13 Aztec's plaza was the heart of the pueblo's daily activities. Nine hundred years ago Pueblo people carried out many of the same tasks as modern-day Americans, albeit with more primitive tools and equipment. Try to visualize, and hear, daily life. Aztec's inhabitants are bringing in farm produce, game, and water; grinding corn or seeds; cooking over open hearths; making pottery, baskets, tools, and ornaments; and sewing clothing. That unexpected sound and odor is coming from the turkey pens by the first row of rooms. Of course children are running about, yelling and throwing a leather ball, or tossing sticks to a dog. On ceremonial days spectacularly dressed members of the pueblo dance in the plaza, in ancient rituals to bring rain and good harvests.

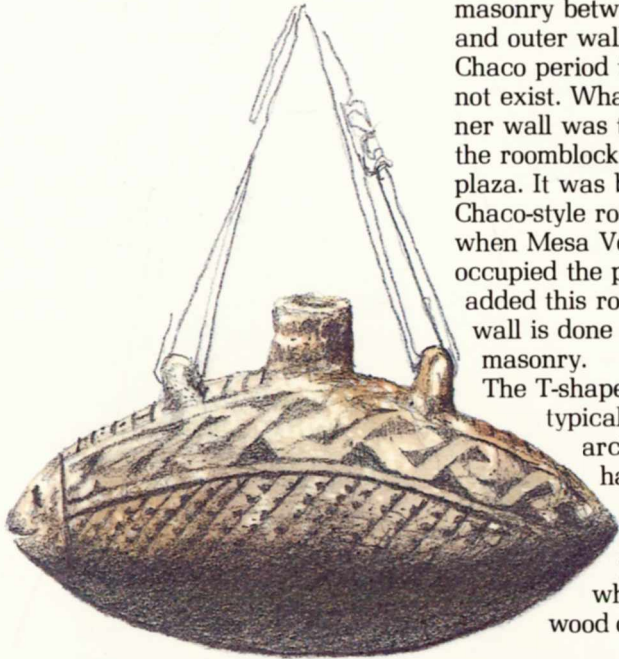


PLAZAS were the center of daily life. The approximately 500 unit pueblo may have been occupied by as many as 700 people.

14 Here you can see evidence of the two separate occupations of Aztec in the masonry between the inner and outer walls. During the Chaco period this room did not exist. What is now its inner wall was the outside of the roomblock, facing the plaza. It was built with Chaco-style rockwork. Later, when Mesa Verde people re-occupied the pueblo, they added this room, so the outer wall is done in their style of masonry.

The T-shaped doorway is typical of late Pueblo architecture. Perhaps the wide upper portion made it easier for a person to get in while carrying firewood on his shoulders.

15 Throughout their long history the Anasazi were interested in art. Rock art was



common and decorations were applied to pottery or woven into fabric or baskets. Many kiva wall paintings, or frescoes, also have been found. The clay plaster on this wall was painted red and white, probably using iron oxide and powdered gypsum. The surface then was incised to make images, a few of which can still be seen. The painted surface you see was completely covered with plaster when this room was excavated and the art was revealed as archeologists carefully flaked off the outer layer of plaster.

16 This kiva was built during the Chacoan occupation of the pueblo. Notice the rockwork is different from the Chaco style two stops back. Here the stones are basically the same size, instead of those alternate bands of large and small stones. Both

though are familiar Chacoan styles.

Looking around you can see several styles of masonry. It is interesting to try to figure out which differences are due to deliberate style changes, and which simply come from differences in the masons' skill. A single pueblo may contain work a person did as an 8-year old helping her folks, the amateurish work of a teen-ager, and finally that of a skilled mason, all the same person. In historic times Pueblo women did most of the rockwork, so perhaps in pre-historic times this was also considered womens' work.



a



b

MASONRY STYLES
at Aztec are of two main

types and represent two occupations. Typical Chaco (a)

and Mesa Verde (b) styles are present at Aztec Ruins.



CORNER DOORWAYS

are another example of the technical sophistication of these ancient people.

17 You are now at the north-east corner of the plaza. At the upper story of the adjacent roomblock is a fine example of a corner doorway. Since the strength of the corner is vital to any construction, success fully putting a door there is a remarkable engineering feat and evidence of careful architectural planning.

Notice the modern drain in the wall in front of you. Much of what you see has been "stabilized." This is because as much as the National Park Service would

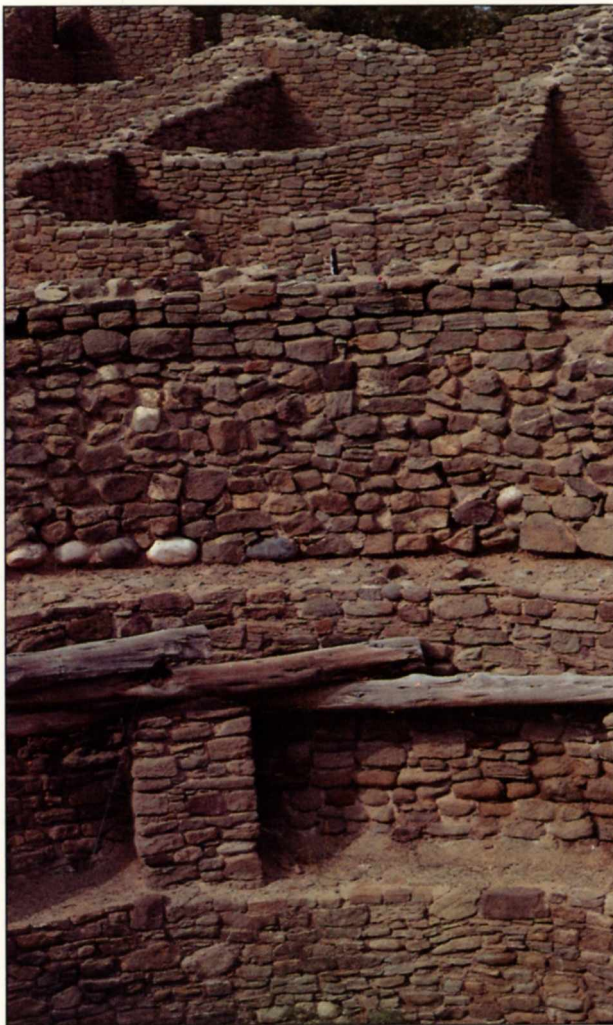
like to have you see precisely what existed prehistorically, it simply would not last. At most archeological sites not intended for exhibition the ruins are simply excavated, studied, and backfilled. To prepare a site for permanent display it has to be stabilized. The original rocks are used but the disintegrated mortar is replaced. Original wood that was preserved underground has to be protected, chemically or with shelter, once it is revealed. Stabilization is kept as non-

intrusive as possible.

From here the trail leads through a series of rooms in the east wing, then doubles back to this point.

18 Excavation revealed deposits in this room 5.5 to 8 feet (1.7 to 2.4 meters) deep. Evidently refuse had been dumped in through a central roof hatch, since accumulations were highest at the center of the room and sloped downwards in all directions. This refuse contained artifacts including ceramic

bowls, dippers, jars and pots, carved wood, shell bracelets, pendants, beads, axes, knives, arrow points, hammers, scrapers, spatulas, bone needles and awls, and a shell bracelet set with turquoise. These were typical possessions, many broken or worn out, and tell us about the people who lived here. Most of the artifacts collected by Earl Morris in the course of his research at Aztec are at the American Museum of Natural History in New York City, which sponsored his work.



19 This large plaza kiva, originally constructed by Aztec's Chacoan occupants and later remodeled by the Mesa Verdians, combines features of both building styles. We have put a few wall timbers in place to demonstrate cribbed log building methods commonly used for kivas. This cribbed technique is appropriate for round structures.

At the next stop, you will see the largest type of kiva, the "Great Kiva."

ROOF CONSTRUCTION

20 This is the only fully restored Great Kiva in existence. The structure was excavated by Earl Morris in 1921 and reconstructed by him 13 years later.

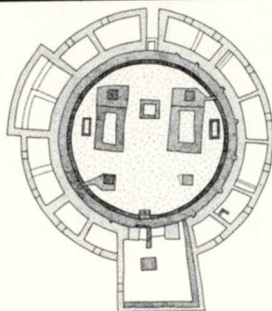
Some archeologists believe that Great Kivas originated among prehistoric people to the south and spread into the Anasazi province in the A.D. 700s. Great Kivas were public buildings, constructed and maintained by members of the surrounding community. Great Kivas have traditionally been described solely in terms of their presumed religious or ceremonial function. In recent years archeologists have begun to suspect that Great Kivas had different or additional uses. They may have been administrative centers, for example, for a

trading system. They also may have had a social function.

We must be careful in making comparisons between pueblo beliefs and non-pueblo beliefs, both prehistoric and today. In non-pueblo cultures we tend to separate religion from the rest of our lives; we assume the church is religious but a club is social. To the Pueblos these are very nearly the same thing. If the kivas were the Anasazi equivalent of our churches, at the same time they may have been the equivalent of our community centers. The mysteries of the Chacoan phenomenon have only begun to be understood and as more information comes to light the role of the Great Kivas may become clearer.

GREAT KIVAS

have been found at a number of sites in the Southwest. Archeologists continue to debate the purpose of these impressive structures.



21 This Great Kiva has an interior diameter of just over 48 feet (15 meters), moderate as compared with the over 60 foot (18 meters) diameter of the Great Kiva of Casa Rinconada at Chaco Canyon. A series of 15 roofed surface rooms and the alcove in which you are standing encircle the kiva proper. Each of these rooms was built with an exterior doorway leading into the courtyard, but later these were sealed.

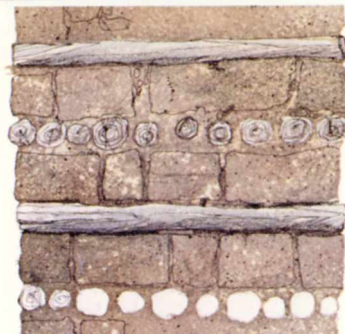
The kiva is encircled by a bench. (Morris found two, but apparently one was a remodeling, so just one was in existence at a time.) Four massive pillars of alternating masonry and horizontal poles held up the ceiling beams which in turn supported a roof whose original weight

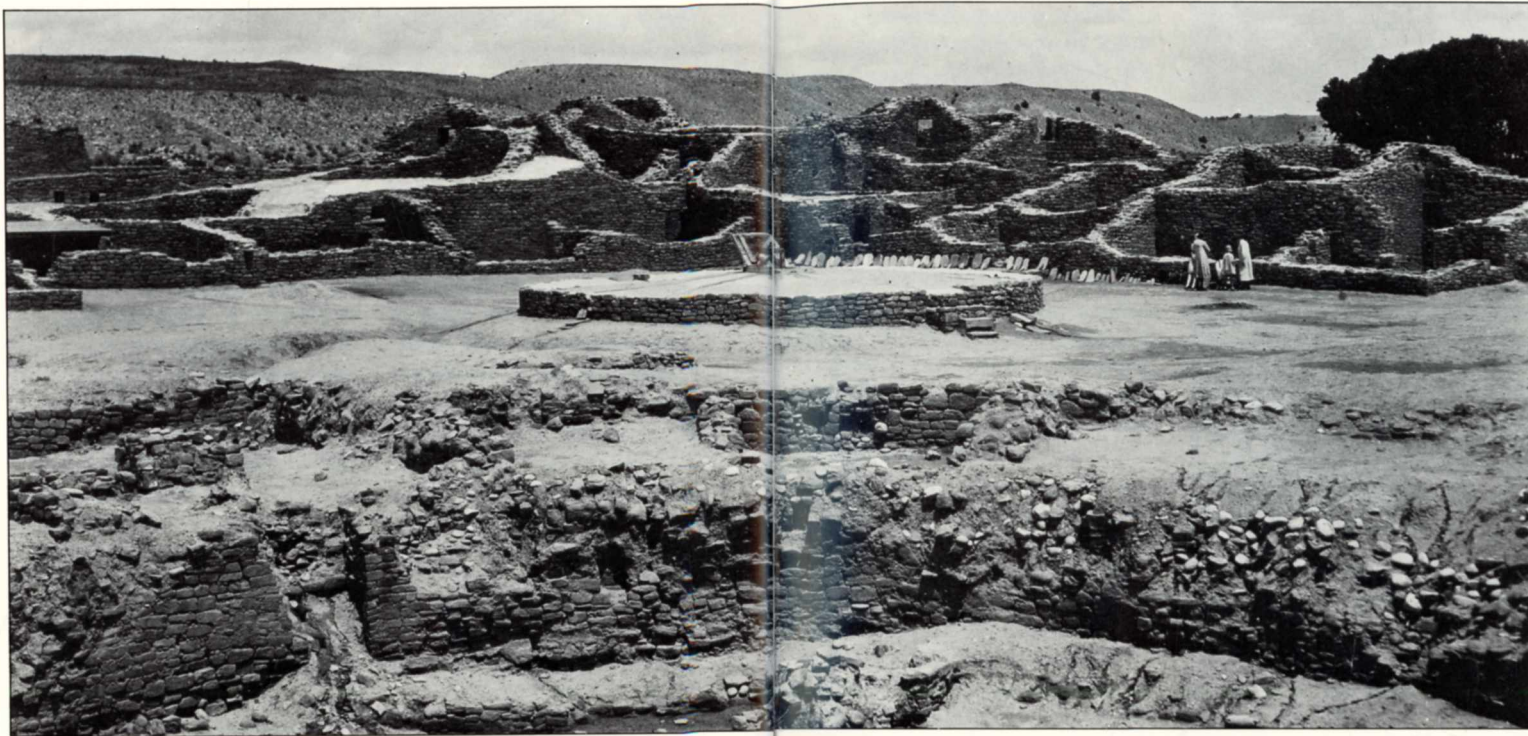
has been estimated at 95 tons (86 metric tons). Each pillar rested on 4 stone discs, each weighing about 375 pounds (169 kilograms). These discs were made of a very fine-grained limestone that probably came either from southern Colorado, or from the Carrizo Mountains west of Shiprock, New Mexico. Why were they transported here from such a distance? Perhaps the stupendous labor of bringing such monoliths to Aztec was itself an integral part of Anasazi religious ritual.

The purpose of the large floor vaults on either side of the central firepit is not definitely known. However similar pits found in present-day kivas are used in connection with certain feats of ritual

PILLARS

of mortar and wood supported the immense roof. The pillars were set on the round stones you see on the kiva floor.





magic. It is also possible they served as foot drums, or sweat baths. You will note that small ladders are set into the walls (please do not climb) around the kiva and lead to the perimeter chambers. Today we can only

speculate on how these chambers related to what took place in the kiva.

BEFORE RECONSTRUCTION

This photo of Aztec Ruin was taken in 1933. The Great Kiva has been excavated but not reconstructed.

22 Archeologists are in a frustrating, fascinating business; it seems like every new bit of information means a new set of questions. This roomblock is puzzling. Morris reported Chaco pottery in the refuse and rooms. But does the masonry look Chacoan? Not at all: river cobblestones are not the carefully shaped rocks typical of Chaco masonry. But if it is Mesa Verdian, from a later occupation, how did the Chacoan debris get into it?



23 The reasons for settlement of the Aztec area in the early 1100s have been mentioned: fertile soil, reliable supply of water, abundant natural resources, and a suitable growing climate. But why was the pueblo abandoned, abandoned twice?

This question has perplexed several generations of archeologists both as it relates to Aztec, and to the entire San Juan region. There are several hypotheses.

Early archeologists believed the Anasazi were driven out of their homeland by Athabascan (Apache) invaders. This theory has been largely discredited by recent archeological findings, and researchers now look increasingly to the environment for clues to the abandonment.

There is no question the late 1200s were plagued by dry spells, and the period from 1276 to 1299 was one of intensive drought; we know this from tree-ring data and other sources.

Added to drought was an overuse of natural resources, particularly in densely populated localities such as Mesa Verde, Chaco Canyon and Aztec. After two hundred years along the banks of the Animas, how far did the Aztec people have to travel on foot just to gather firewood or to find game?

Amidst the disagreement on the causes of Anasazi abandonment of this region there is one point everyone agrees upon: the Anasazi were farmers and farming, then as today, is a risky and



unpredictable business. To have farmed as successfully as they did for hundreds of years in the semi-arid environment is a remarkable accomplishment.

We do not know exactly where the residents of this particular pueblo went. There is good evidence the San Juan Anasazi moved eastward to the Rio Grande Valley where they re-

established thriving settlements. It is entirely possible that if you visit the existing pueblos of Taos, San Juan, or Santo Domingo, you will meet the descendants of the people of Aztec Pueblo.

The path now returns to the Visitor Center, where

there are exhibits and where National Park Service rangers will be happy to talk with you more about this site.



Southwest Parks and Monuments Association was founded in 1938 to aid and promote the educational and scientific activities of the National Park Service. As a nonprofit organization authorized by Congress, it makes interpretive material available to park visitors by sale or free distribution. All net proceeds support the interpretive and research programs of the National Park Service.

