

Pueblo Bonito was the largest town in the Chacoan system. This painting by Lloyd K. Townsend is a well-researched though still hypothetical view of the great house in the early 1100s, when it stood four stories high and contained hundreds of rooms and dozens of kivas.

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A Center of Anasazi Culture

Chaco Canyon, for all its wild beauty, seems an unlikely place for the Anasazi culture to take root and flourish. This is desert country, with long winters, short growing seasons, and marginal rainfall. Yet a thousand years ago, this valley was a center of Anasazi life. This people farmed the lowlands and built great masonry towns that connected with other towns over a far-reaching network of roads. In architecture, in complexity of community life, in social organization, the Anasazi of Chaco Canyon reached heights rarely matched and never surpassed by their kindred in the Four Corners region.

The cultural flowering of the Chaco Anasazi began in the early AD 900s. We can see it most clearly in the architecture. They started building on a much larger scale. Using the same masonry technique as before—walls one stone thick with generous use of

mud mortar—they built multistory stone villages with rooms several times larger than in the previous stage of their culture. Six of the large pueblos—Pueblo Bonito, Chetro Ketl, Una Vida, Peñasco Blanco, Hungo Pavi, and Kin Bineola—were started at this time. This pattern of a large pueblo with oversized rooms, surrounded by conventional villages, caught on throughout the region. New communities built along these lines sprang up. Old villages built similarly large pueblos. Eventually there were more than 75 of these “towns,” most of them closely tied to Chaco by an extensive system of roads.

By AD 1000 Chaco was firmly established as the political and economic center of the Chaco Plateau. There may have been as many as 5,000 persons living in some 400 settlements in and around Chaco or as few as 2,000, depending upon which

assumptions are used to estimate the population. A new masonry technique—the use of masonry walls with rubble cores and outer surfaces of shaped stones—allowed walls to rise to more than four stories in height. Some large buildings show signs of being planned from the start, in contrast to the usual Anasazi custom of adding rooms as needed. Chaco at this time may have been the hub of an extensive political and economic system that drew in goods and commodities and directed affairs over a wide region.

How to account for this blossoming? One theory is that Chaco developed as an administrative and ritual center mainly in response to environmental fluctuations. The vagaries of weather made farming chancy. One year might be wet, another dry, one growing season long, another short. According to this theory,

Chaco may have been a kind of capital that directed the agricultural life of the region, tempering good years with bad. Food could be stored here and redistributed as needed. The outlying towns can be thought of as satellites that performed for their locality the same function that Chaco did for the region.

The decline of Chaco apparently coincided with a prolonged drought in the San Juan Basin between 1130 and 1180. Lack of rainfall combined with an overtaxed environment may have led to food shortages. Even the clever irrigation methods of the Chacoans could not overcome prolonged drought. Under these pressures Chaco and the outliers may have experienced a slow social disintegration. The people began to drift away. They retreated to better watered regions, leaving behind impressive evidence of their former influence over a vast territory.

Clues to the Past

The Road System

The true extent of the ancient Chacoan road system, as revealed by aerial photographs, impressed even veteran archeologists. There were more than 400 miles of roads connecting Chaco to some 75 communities. The longest road presently known runs 42 miles north toward the prehistoric towns now called Salmon Ruins and Aztec Ruins. On the north-south roads, settlements lay at travel intervals of approximately one day.

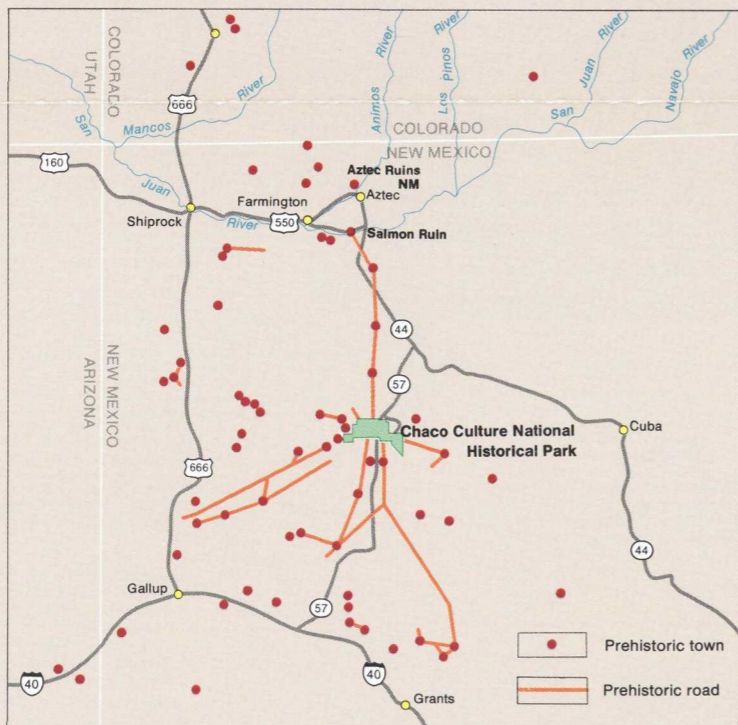
These roads were not simply trails worn by centuries of foot travel. They were the productions of relatively sophisticated engineering and required a great deal of energy and thought to plan, construct, and maintain. They were laid out in long, straight lines with scant regard for terrain. The roads averaged 30 feet in width. Construction was simple. On sloping ground the roadbed was leveled and a rock berm built to retain the fill.

Where the roads passed over bare rock, they were often bordered by masonry walls or a line of boulders.

The roads appear to date from the 11th and 12th centuries, a time of expanding population. Several roads converged at Pueblo Alto from the north. From there well-defined stairways led to the canyon bottom.

Aside from its obvious purpose of easing travel within the Chacoan world, this network could have facilitated communications and the transport of goods and materials between towns and helped bind Chacoans into a single society.

Chaco and Its Principal Outliers ▶



Trade

During Classic times, Chaco was the center of a far-flung trading network. Goods were exchanged internally within the Chacoan system and externally with groups as far south as Mexico. Chaco's distinctive Cibola black-on-white pottery (seen at right) may have originated in out-lying towns to the south and west. One estimate is that only about 20 percent of the pottery used here was made here. This may have been because there was better clay in other villages and more wood available for firing the vessels.

What Chaco lacked in pottery it more than made up for in turquoise ornaments. Raw turquoise was imported from distant mines and transformed with exquisite craftsmanship into necklaces, bracelets, and pendants. Great quantities of such jewelry have been found here, more than at any other southwestern site. This small frog carved in jet, found in

Pueblo Bonito, has eyes and a collar of turquoise.

Other evidence of the trading system are the many seashells (often strung into necklaces), copper bells, and remains of macaws or parrots found here. The two latter items suggest contact with Mexico, perhaps with the ancient Toltecs.



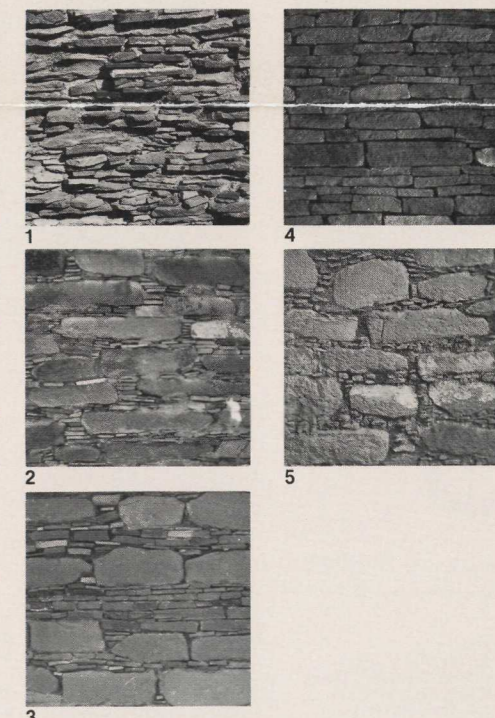
American Museum of Natural History



Masonry

The Chaco Anasazi were skilled masons. Working without metal tools or any formal mathematics, they put up vast communal buildings that still compel admiration. Their methods evolved over centuries. The earliest dwellings were constructed with simple walls one stone thick, with generous courses of mud mortar. The oldest walls in Pueblo Bonito used this type of masonry 1. When the Chacoans began to build higher and more extensively, they employed walls with thick inner cores of rubble and fairly thin veneers of facing stone. These walls

tapered as they rose, evidence of the planning that went into the large-scale construction of Classic times (AD 1020-1120). An early example of this type of wall 2 is characterized by large blocks of irregular sandstone chinked with smaller stones set into the mortar. About half the ground floor of Pueblo Bonito was built in the style of masonry types 3 and 4 (late 11th century). Oddly enough, both styles were employed at roughly the same time. Though the patterns are pleasing, there's evidence that plaster covered the stonework. The last distinctive masonry style, called McElmo 5, appears in Kin Kletso, a late 11th century dwelling. Its walls were built with a thin inner core of rubble and thick outer veneers of shaped sandstone, somewhat similar to the masonry styles used at Mesa Verde. To some eyes, it's less workmanlike than the earlier types, but the Chacoans may have thought differently.



A Guide to Chaco

For Your Safety

For your safety and the preservation of the park's resources, stay on designated trails in the ruins and backcountry and do not climb on the ruins. Trails can be slippery and often are uneven or steep. Hikers should wear sturdy shoes or boots. Rattlesnakes are common in warm weather. Camp only in the designated campground. No backpacking or overnight camping is permitted

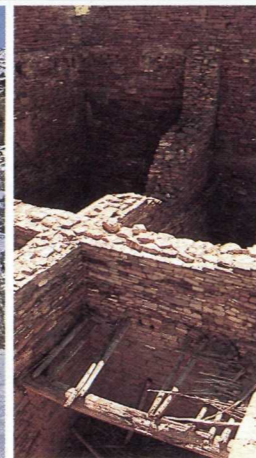
in the backcountry. All ruins in the backcountry are closed from one-half hour after sunset until one-half hour before sunrise. Pets, which must be kept on a leash (not to exceed 6 feet) at all times, are not allowed in the ruin.



Pueblo del Arroyo is a D-shaped great house that rose three and four stories high in the rear, stepping down to one

story in front. Abutting the rear wall is a tri-walled structure, one of a handful known in the Southwest. This feature was

built sometime after 1100, late in the pueblo's construction history.



This flooring in del Arroyo was carefully constructed of layers of beams, poles, sticks, bark, and adobe mud.



New Alto stands on the north mesa, near Pueblo Alto. Originally two stories high, it had 55 rooms and a single kiva. The village was built in the

early 1100s, in a style known as McElmo. The builders may have been migrants from the north.



Chacoan masons worked with precision and care, as these doors at Pueblo Bonito show.



One of the largest Chacoan villages, Chetro Kell flourished about 1050. Among its interesting features are two "great kivas" and two

elevated kivas. The remains of a colonnade (later filled in during remodeling) along the rear wall of the plaza suggests influences from Mexico.

One extraordinary find here was a pile of wooden objects: birds, prayer sticks, arrows, discs. They were probably used in ceremonies.



Casa Rinconada, built about 1100, is one of the largest "great kivas" in the Southwest. Some students speculate that because it is not close to

photo above by David Muench

any village, this kiva may have been a center of some sort for the community at large.

The Ruins of Chaco Canyon

The best way to see the ruins is to go on a conducted walk with a ranger. For information on these tours and the evening campfire programs, inquire at the visitor center. Groups desiring special services should schedule them in advance with the superintendent.

Begin your sight-seeing at the visitor center. The exhibits will help you understand Chaco and its people. Rangers will answer your questions and help you make the most of your time.

The ruin closest to the visitor center is **Una Vida**, which can be reached by trail from the parking lot. Only partially excavated, it looks much as it did when Lt. James H. Simpson of the U.S. Army described it in 1849. Construction was underway by AD 930 and continued until late in the next century. There are 5 kivas and about 150 rooms in the structure.

The core of this Anasazi complex lay farther down the canyon. The largest and best known of the great

houses is **Pueblo Bonito**, which was occupied from the early 900s to about 1200. Built in stages, this pueblo in its final form contained some 600 rooms and 40 kivas and rose four stories high. The pueblo was first excavated at the turn of the century and again intensively in the 1920s. It is considered the "type" site for the Classic Bonito Phase (AD 1020 to 1120) of Chacoan culture.

Chetro Kell was begun about 1020. Completed in most respects by 1054, it was remodeled and enlarged in the early 1100s. It holds an estimated 500 rooms and 16 kivas. The enclosed plaza is a typical feature of great houses from this period.

Pueblo del Arroyo was built in stages over a relatively short time. The central part was started about 1075; north and south wings were added between 1095 and 1105; the plaza and the tri-walled structure were constructed about 1110. The building had about 280 rooms and more than 20 kivas.

Kin Kletso seems to have been built in two stages. The first one dates from about 1125, the second from 1130 or later. This pueblo had about 100 rooms and 5 enclosed kivas and may have risen three stories on the north side.

Casa Rinconada on the south side of the canyon is the largest "great kiva" in the park. The trail leading to this ruin passes by several villages contemporary with it and continues up the mesa to the great house **Tsin Kletsin**, with its panoramic view.

Hiking trails, as indicated on the map, lead to a number of other ruins. **Pueblo Alto**, on top of the mesa, is important as the junction of several prehistoric roads. **Casa Chiquita** and **Peñasco Blanco** can be reached by hiking from the central canyon. **Wijiji**, built in a single stage in the early 1100s, is notable for its symmetrical layout and rooms of uniform size.

About Your Visit

The park is located in northwestern New Mexico. From the north, turn off N. Mex. 44 at Nageezi and follow San Juan County road 7800 for 11 miles to N. Mex. 57. The visitor center is 15 miles ahead. From the south, turn north onto N. Mex. 57 from I-40 at Thoreau and go 44 miles on the paved road. Two miles north of Crownpoint, N. Mex. 57 turns to the right. Continue east on N. Mex. 57 to a marked turn-off. From here a 20-mile stretch of unpaved road leads north to the visitor center. Inquire locally or call the park (505-988-6727 or 6716) about the condition of the dirt roads during bad weather.

No lodging, gasoline, repair services, or food are available at the park. The nearest town is 60 miles away. On weekdays, staples can usually be purchased at trading posts on N. Mex. 44. The NPS operates a campground a mile from the visitor center. Tables, fireplaces, and central toilets are provided. Water is only available at the visitor center; no firewood is

available in the park. Trailers over 30 feet long cannot be accommodated. Camping is limited to 14 days.

Regulations The superintendent and his staff are here to help you understand and enjoy the park and to protect all prehistoric remains and the park's plant and animal life. The Federal Antiquities Act of 1906 and the Archeological Resources Protection Act of 1979 prohibit the appropriation, injury, destruction, or removal of any object of antiquity, or the excavation, injury, or destruction of any ruin on Federal land. Please leave all antiquities and broken bits of pottery where they lie. They may contribute to research and to the enjoyment of visitors who come after you.

Administration Chaco Culture National Historical Park is administered by the National Park Service, U.S. Department of the Interior. A superintendent, whose address is Star Route 4, Box 6500, Bloomfield, NM 87413, is in immediate charge.

To learn more about Chaco *Chaco Canyon: Archeology and Archeologists* (Albuquerque, 1981) by Robert H. Lister and Florence C. Lister is an account of the human habitation of the canyon as revealed by a century of archeological work. For a technical summary of recent archeological investigations at the park, see Alden C. Hayes, David M. Brugge, and W. James Judge's *Archeological Survey of Chaco Canyon, New Mexico* (Washington, 1980). Kendrick Frazier's *People of Chaco: A Canyon and its Culture* is a good summary of Chacoan prehistory for general readers.

These and other books can be ordered through the park's cooperating association. Write to the park for information.

