

Ancestral Pueblo Indians of Southwestern Colorado

Who were the Ancestral Pueblo Indians of southwestern Colorado?

What happened to them?

Why is it important to preserve the sites they left behind?

By Kristin A. Kuckelman *

Standards Addressed and Teaching Strategies by:

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Standards Addressed

A quick-glance overview of social studies standards that teachers might address in 4th grade, 8th grade, and high school using the resources in this set.

4th Grade

History:

- *Standard 1.1:* Organize and sequence events to understand the concepts of chronology and cause and effect in the history of Colorado
- *Standard 1.2:* The historical eras, individuals, groups, ideas and themes in Colorado history and their relationships to key events in the United States

Geography:

- *Standard 2.1:* Use several types of geographic tools to answer questions about the geography of Colorado
 - *Standard 2.2:* Connections within and across human and physical systems are developed
-

8th Grade

History:

- *Standard 1.1:* Formulate appropriate hypotheses about United States history based on variety of historical sources and perspectives
- *Standard 1.2:* The historical eras, individuals, groups, ideas and themes from the origins of the American Revolution through Reconstruction and their relationships with one another

Geography:

- *Standard 2.1:* Use geographic tools to analyze patterns in human and physical systems
- *Standard 2.2:* Conflict and cooperation occur over space and resources

Economics:

- *Standard 3.1:* Understand the allocation of scarce resources in societies through analysis of individual choice, market interaction, and public policy

Civics:

- *Standard 4.1:* Analyze and practice rights, roles, and responsibilities of citizens
-

High School

History:

- *Standard 1.1:* Use the historical method of inquiry to ask questions, evaluate primary and secondary sources, critically analyze and interpret data, and develop interpretations defended by evidence
- *Standard 1.2:* The key concepts of continuity and change, cause and effect, complexity, unity and diversity over time

Geography:

- *Standard 2.1:* Use different types of maps and geographic tools to analyze features on Earth to investigate and solve geographic questions

Economics:

- *Standard 3.1:* Productive resources – natural, human, capital – are scarce; therefore, choices are made about how individuals, businesses, governments, and societies allocate these resources

Background

Ancestral Pueblo Indians – also known as the Anasazi – inhabited the southwestern portion of Colorado for more than a millennium, beginning sometime before A.D. 1 and continuing until about A.D. 1280. Members of this culture also inhabited areas of southeastern Utah, northeastern Arizona, and northwestern New Mexico beginning as early as 1000 B.C.

Ancestral Pueblo peoples were the descendants of hunters and gatherers: nomadic peoples who exploited wild plants and game in mostly planned seasonal rounds and who sheltered in expedient brush wickiups or natural rock alcoves. Nomadic peoples no doubt made carefully considered decisions about where to travel and the optimum time of arrival at target locations; specific destinations might have varied from year to year, depending on a host of changing factors and conditions.

As lifeways including the domestication of crops spread northward from regions far to the south, these nomadic bands increasingly adopted an agricultural subsistence and became sedentary, gradually developing a distinct “Pueblo” culture. During their long occupation of southwestern Colorado, Pueblo farmers cultivated maize (corn), beans, and squash, gathered wild plant foods, raised domesticated turkeys, hunted wild game, built homes and other types of structures, and reared their children on this high-elevation, semiarid landscape.

The term “Anaasázi” is a Navajo term (and spelling) variously translated as “ancient ones,” “ancient enemy,” “old enemies,” or “enemy ancestors.” Because the term is considered impolite, even insulting, by many contemporary Pueblo Indians, the appellation “Ancestral Pueblo” is now considered the more acceptable term.

The earliest ancestral Pueblo settlers in Colorado, called Basketmakers by archaeologists, lived in small family groups in rock shelters or on deep soils suitable for dry farming. They lived in shallow pithouses and stored surplus crops in cists. Cultivated crops were supplemented with wild plant foods and with meat from game such as mule deer and cottontail rabbit. Bow-and-arrow technology supplemented the spear and atlatl as hunting tools and weapons of warfare during this time. Basketmakers brought domesticated turkeys into southwestern Colorado; they used turkey feathers to make blankets and ceremonial items and their bones to make tools and other objects, but turkey was not part of their diet during Basketmaker times. The construction of post-and-adobe storage rooms began during this period, and beans were added to the diet. Early Basketmakers did not produce pottery, but pottery technology reached this culture by A.D. 500. Pottery was useful for cooking beans. Archaeologists place the end of the Basketmaker period at about A.D. 750.

During the ensuing centuries, referred to by archaeologists as the Pueblo I, Pueblo II, and Pueblo III periods (A.D. 750 to about 1280), Ancestral Pueblo society underwent many cultural and technological changes: post-and-adobe rooms were replaced with rooms constructed of stone masonry, the bow-and-arrow replaced the atlatl and spear, earth-walled pithouses were replaced with stone-lined kivas, pottery forms and decoration became more varied and elaborate, domesticated turkeys became a dietary staple, reservoirs and check dams were constructed, cotton was obtained through trade with peoples to the south, and society increased in complexity. Cohesive communities with public architecture such as great kivas became established.

However, southwestern Colorado was a challenging environment for a prehistoric farming society. Periods of drought diminished or destroyed crops, and climatic variability that caused a reduction of

even a few degrees in the average temperature curtailed the growing season such that maize crops could not mature. As climatic conditions fluctuated, families moved about the landscape as necessary to exploit areas of greatest farming potential. Population waxed and waned. Wild resources were increasingly depleted; mule deer, in particular, an important source of animal protein, became scarce on the landscape during the final few centuries of Pueblo occupation.

A severe drought that began about A.D. 1276 was particularly devastating for the Pueblo farmers of southwestern Colorado. The population of the northern San Juan region had peaked sometime during the early or middle A.D. 1200s at an estimated 20,000 residents, many of whom, in the mid-thirteenth century, had aggregated in large, walled villages constructed around canyon-head springs or in the well-known cliff alcoves in what would become Mesa Verde National Park. This drought severely impacted crop yields, and settlements were forced to rely on wild resources, which had become largely depleted. Violence escalated, probably at least partly as a result of competition for resources. Those who survived these tumultuous times migrated southward or southeastward by about the early A.D. 1280s, and Pueblo peoples never again inhabited the southwestern corner of Colorado.

For hundreds of years thereafter, the movement of Pueblo peoples across the landscape of the northern Southwest forms a complex history that is difficult for archaeologists to unravel. Defining these migrations and movements is complicated not only by the subsequent influx of other cultures – including Ute and Navajo Indians, as well as Spanish explorers and religious figures – into the northern Southwest but also by the numerous types of interactions of these groups, including conquest, warfare, relocation, and intermarriage. However, it is known that descendants of the Ancestral Pueblo Indians who had inhabited southwestern Colorado for more than a millennium reside in some of the 20 pueblo settlements that exist today in northeastern Arizona and northern New Mexico.

During historic times in southwestern Colorado, early Euro-American settlers became interested in the Mesa Verde cliff dwellings and other Ancestral Pueblo sites. In the late 1800s, many entire cliff dwellings were quickly excavated by relic hunters; most of this activity was conducted without scientific methods or documentation. As a result, unique, invaluable, and irreplaceable contextual data such as precise locational information and stratigraphy were destroyed forever. And because no laws protected antiquities at that time, of the many thousands of objects and remains that were unearthed from these sites, a large proportion was subsequently lost, sold, or removed from the US.

Our knowledge of Ancestral Pueblo Indians is mostly dependent upon the preservation, conservation, and careful scientific study of the remains of this culture. Although today federal laws protect archaeological sites on public lands, few looters are caught or prosecuted. Sites on private lands are controlled by landowners, who are free to protect or destroy these precious deposits at will. Future preservation of archaeological sites rests with the education of the lay public to increase awareness of the value of these cultural resources, which contain the unique ability to inform us through empirical, scientific data about the Ancestral Pueblo Indians who inhabited the southwestern corner of Colorado for many centuries and who played such a prominent role in the prehistory of our state.

Glossary

atlatl: a spear thrower; a narrow piece of wood with a small projection at one end that fits into the end of a spear shaft to hold the spear in place until it is released.

canyon-head settlement: a group of habitations constructed around the head of a canyon.

check dam: a small dam built across a small arroyo or other drainage to reduce erosion, slow water flow, and allow sediment to settle.

cist: a pit excavated into the ground, usually capable of being sealed, that is used for the storage of food or other material goods.

great kiva: a kiva that was much larger than a residential kiva and that contained distinctive features such as floor vaults (or foot drums); probably used for community religious, social, and civic ceremonies and events.

hamlet: a small village.

kiva: a structure built by Ancestral Pueblo people that was usually circular, usually subterranean or partly subterranean, and contained features such as a cooking hearth, a ventilator system, roof-support pilasters, and a deflector; kivas were used for domestic activities and family-level rituals.

mano: a hand-held stone that is usually used to grind or crush grains or seeds.

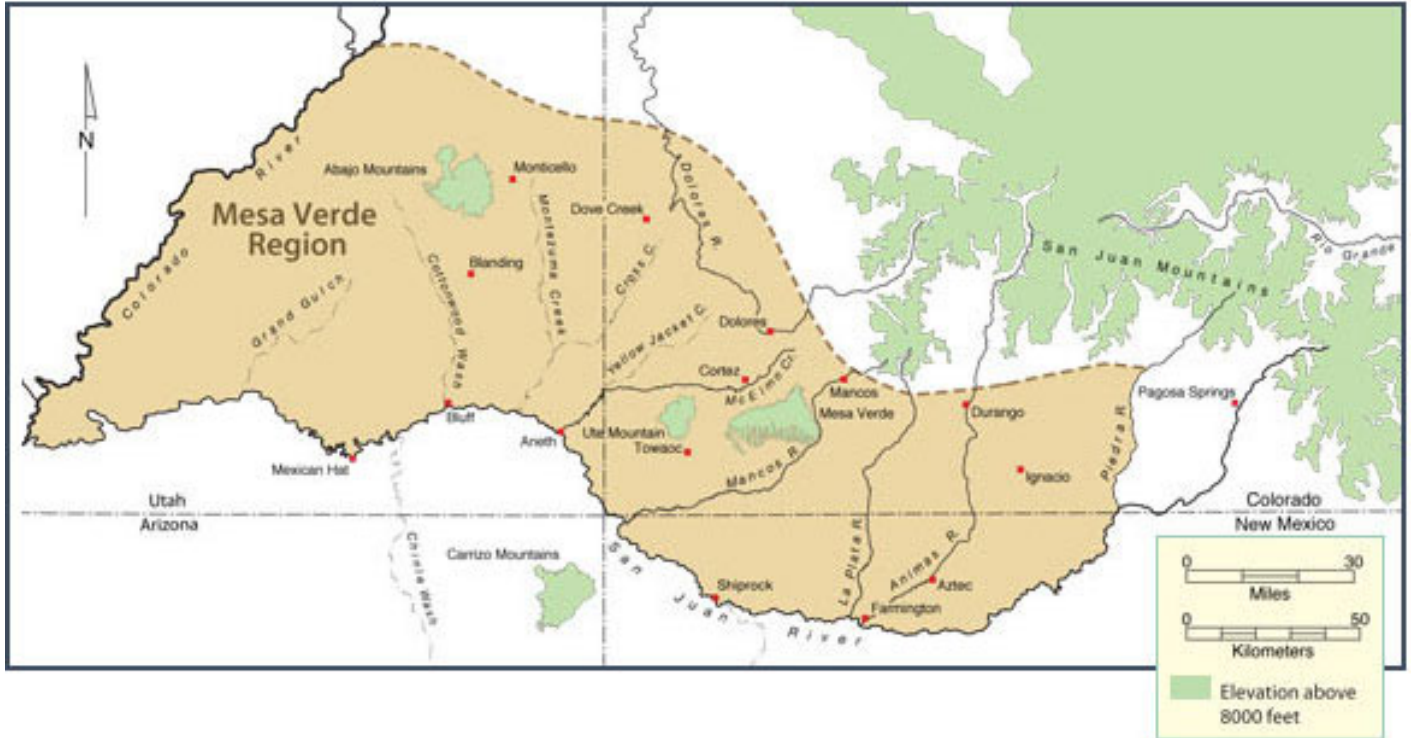
metate: a large stone on which grains or seeds are crushed or ground with a mano.

pithouse: a residential structure that was subterranean or partly subterranean, was roofed with wood and earth, and contained a cooking hearth.

roomblock: a block of adjoining rooms.

stratigraphy: in archaeology, stratigraphy is the vertical layering of natural and cultural deposits; the law of stratigraphic superposition establishes that the lowermost stratigraphic layer was the earliest material deposited and the uppermost layer was the latest material deposited.

wickiup: an American Indian hut fashioned of vegetal material on a wood frame



1 / Primary Sources /Ancestral Puebloans

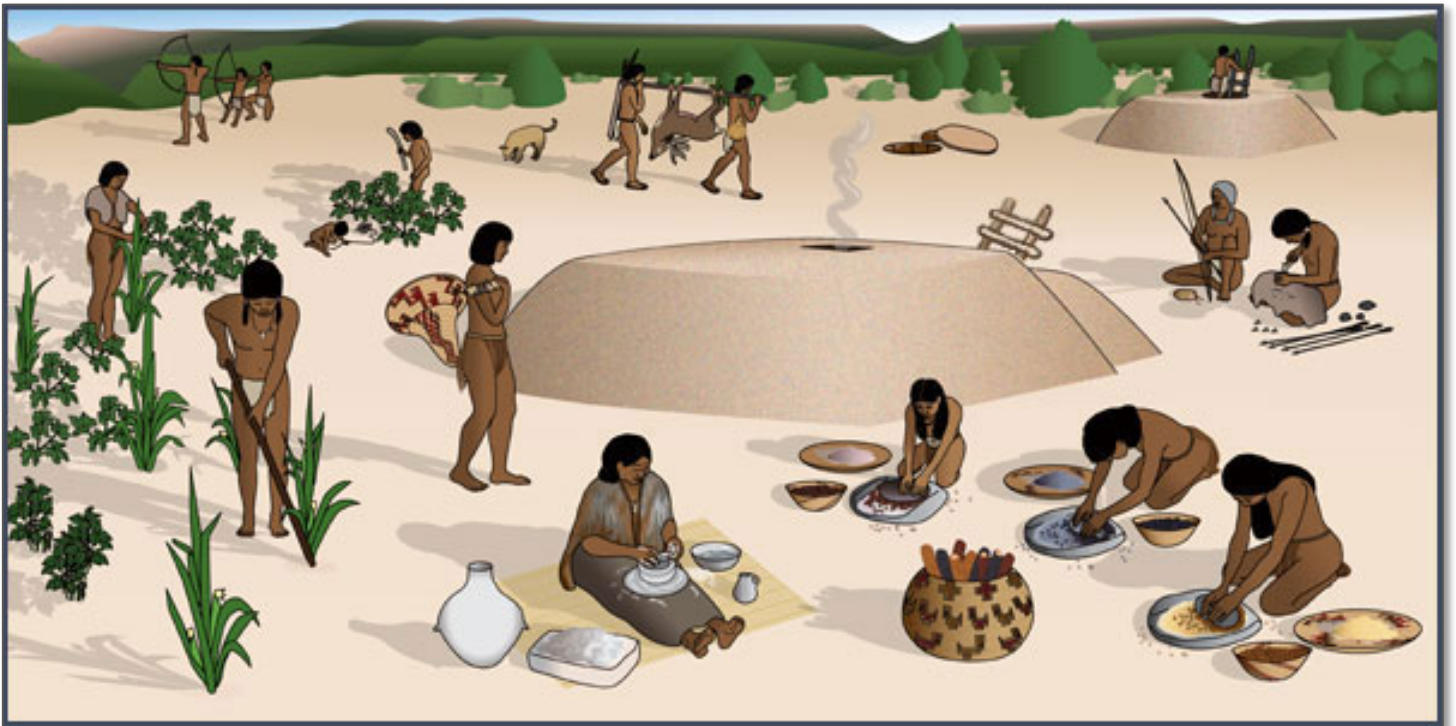
Map of the Mesa Verde Region

Citation

Crow Canyon Archeological Center, "Peoples of the Mesa Verde Region," available online at http://www.crowcanyon.org/educationproducts/peoples_mesa_verde/intro.asp. Copyright Crow Canyon Archeological Center.

Annotation

This map of the Mesa Verde region (also referred to as the northern San Juan region), shows the area of southwestern Colorado that was inhabited by the ancestral Pueblo Indians. The region was bounded on the south by the San Juan River, on the west by the Colorado River, and on the east by the Piedra River. The northern boundary is usually plotted just beyond the towns of Monticello, Utah, Dove Creek, Colorado, and Dolores, Colorado. Pueblo peoples moved into the portion of this region that is now within southwestern Colorado by about A.D. 1, and this landscape was their homeland until they migrated southwestward, southward, and southeastward about A.D. 1280; Pueblo peoples never again inhabited this region. However, today their descendants are among the residents of 20 pueblos in New Mexico and Arizona.



2 / Primary Sources /Ancestral Puebloans Basketmaker Lifeways

Citation

“Basketmaker III Farmstead,” based on original artwork by Theresa Breznau, Living Earth Studios, courtesy of the US Bureau of Land Management Anasazi Heritage Center, available online from Crow Canyon Archeological Center at:
http://www.crowcanyon.org/EducationProducts/peoples_mesa_verde/basketmaker_III_overview.asp.

Annotation

Artist’s reconstructions such as the one above are important tools for translating archaeological data into images that help people today envision ways of life during prehistoric times. Such reconstructions are one of the few means available to illustrate people, activities, and events that predate the invention of photography in the nineteenth century. Even though the exact scene pictured above never occurred, all elements of the scene—the natural vegetation, cultivated plants, structures, tools, clothing, baskets, animals, and activities—have been documented archaeologically for the Basketmaker time period, and the reconstructions contained in this resource set were created in collaboration with professional archaeologists and with the aid of museum collections.

This artist’s reconstruction depicts many important aspects of life for Basketmakers. People of this culture began settling the area that is now southwestern Colorado sometime before A.D. 1. During Basketmaker times, ancestral Pueblo peoples were already heavily dependent on maize crops (tall plants in left foreground, ears of maize are contained in the large basket in the foreground), and they also grew squash (shorter plants in left part of living area). Beans were added to the diet before the end of the Basketmaker period, which archaeologists place at A.D. 750. Farmers continued to gather the wild plant foods and hunt the wild game, including mule deer, cottontail rabbits, jackrabbits, and rodents, that their nomadic ancestors had exploited. They also continued to fashion a wide variety of basketry containers and other woven objects. Families became sedentary, living year-round in permanent, semisubterranean structures called pithouses (the large mound in the center and the smaller mound in the right background) that were roofed with wood and a thick layer of sediment. Manos and metates (being used by three women in a semicircle) were used to grind maize into meal (yellow material in metates and in the flat basket, right foreground).

Domesticated animals consisted of the dog and the turkey. Turkeys were not used as a food source during this period; rather, they were raised for their feathers, which were used to make blankets and ritual objects, and for their bones, which were used to make tools, beads, ornaments, whistles, flutes, and other objects. Most clothing was fashioned from deer hides, rabbit skins, or fibers woven from the yucca plant. By about A.D. 500, Pueblo peoples in southwestern Colorado had begun producing pottery (potter in center foreground, white jar in foreground, bowl in potter’s lap and to her left), which was used for cooking, carrying and storing water, and a wide variety of other purposes. Another important innovation during this time was the bow-and-arrow (being used by the man and child in the upper left background; arrows are being produced to the right of the pithouse), which was more effective than the

spear and atlatl for hunting and warfare. By A.D. 750, this culture had transitioned into what archaeologists call the Pueblo I period.



3 / Primary Sources /Ancestral Puebloans Basketmaker Pottery

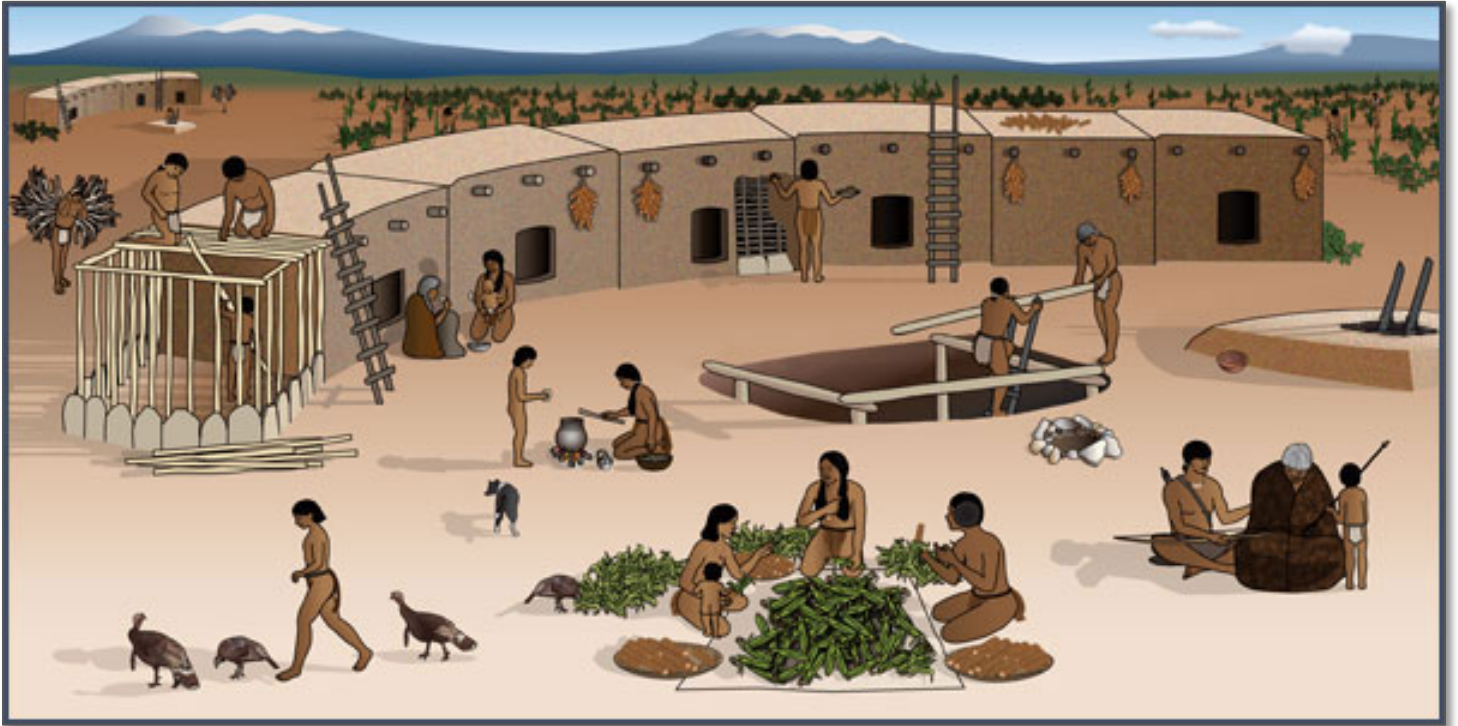
Citation

“Photo Shoot Image #34,” US Bureau of Land Management Anasazi Heritage Center. Copyright Crow Canyon Archeological Center.

Annotation

This photograph shows some types of pottery made by the Basketmakers. By the end of Basketmaker times (A.D. 750), Pueblo potters were producing a wide variety of vessels called Chapin gray (unpainted vessels shown above) and Chapin Black-on-white (painted vessels shown above) by archaeologists.

Some pots were used for cooking (jars at upper left). Cooking in pottery vessels that were placed directly in a fire or on support stones within a hearth was more efficient than the previous method of cooking, which involved dropping hot stones into liquid within baskets lined with waterproof pitch. Other pots, called ollas (jar at top center), were used to transport and store water from a nearby water source, possibly a spring. Among Pueblo peoples in historic times, older girls or young women carried water from the water source to the pueblo. It is likely that bowls in prehistoric times were used as they are today: larger bowl are useful for mixing and preparing batches of food, and smaller bowls are convenient for individual servings. However, it is possible that multiple family members all served themselves out of a shared bowl. Seed jars (upper right) were probably used to store dry foods of various types, possibly wild seeds, berries, acorns, maize kernels, squash seeds, or medicinal herbs. Potters also fashioned dippers (left, foreground), probably to perform tasks such as dipping water from shallow pools into water jars, dipping stew or maize gruel from a cooking jar into a serving bowl, or transferring ingredients from storage vessels to a mixing bowl. The uses of unusual and special forms (tri-lobed vessel, foreground) are unknown, but might have been associated with rituals or ceremonies.



4 / Primary Sources /Ancestral Puebloans

Pueblo I Lifeways

Citation

“Pueblo I Farmstead,” based on original artwork by Theresa Breznau, Living Earth Studios, courtesy of the US Bureau of Land Management Anasazi Heritage Center, available online from Crow Canyon Archeological Center at:
http://www.crowcanyon.org/EducationProducts/peoples_mesa_verde/pueblo_I_overview.asp

Annotation

This artist’s reconstruction* depicts life during the Pueblo I period (A.D. 750–900), when Pueblo farmers began constructing blocks of adjoining one-story rooms and living in larger settlements (pictured behind the roomblock). These structures were of post-and-adobe construction and were roofed with layers of wood and sediment; some walls were reinforced with stone masonry at the base (left center), especially in structures built later in the Pueblo I period. Each family occupied a subterranean dwelling (center and right center) and built above-ground rooms; some rooms were for working, others were for storing surplus crops and extra belongings, and some were used for a variety of domestic activities. Many tasks such as cooking (left of pit structure construction) continued to be conducted outdoors when the weather was clement. The man to the left of the roomblock brings a load of dried, harvested maize stalks to the settlement.

Dependence on the crops maize (center foreground, also hanging from beam ends of room roofs and drying on roof), beans, and squash continued. Wild plants and animals rounded out the diet. Families continued to raise turkey flocks to obtain feathers for turkey-feather blankets and bones for tools, beads, and other objects, but turkey meat was not consumed.

Cotton, an important technological addition to the Pueblo culture, was first traded into the area, possibly as early as A.D. 800, from warmer regions to the south. Clothing, blankets, and other objects were woven from this fiber. Cotton was never grown in southwestern Colorado, because the climate is too cool for successful cotton cultivation.

During the Pueblo I period, the population of the region increased substantially, and many new hamlets and villages, some of which were quite large, were built on the landscape. Numerous additional great kivas were constructed; the gatherings and events held in these structures might have been designed to help build cohesion within communities. However, at the end of this period, the population of southwestern Colorado diminished, possibly because of a climatic shift to conditions too cool and too dry for consistently successful maize cultivation. Evidence suggests that some people moved southward into northwestern New Mexico at the end of this period.

* See Source 2 for note on the role of artist’s reconstructions as sources for conveying archeological information.



5 / Primary Sources /Ancestral Puebloans

Red Ware Pottery

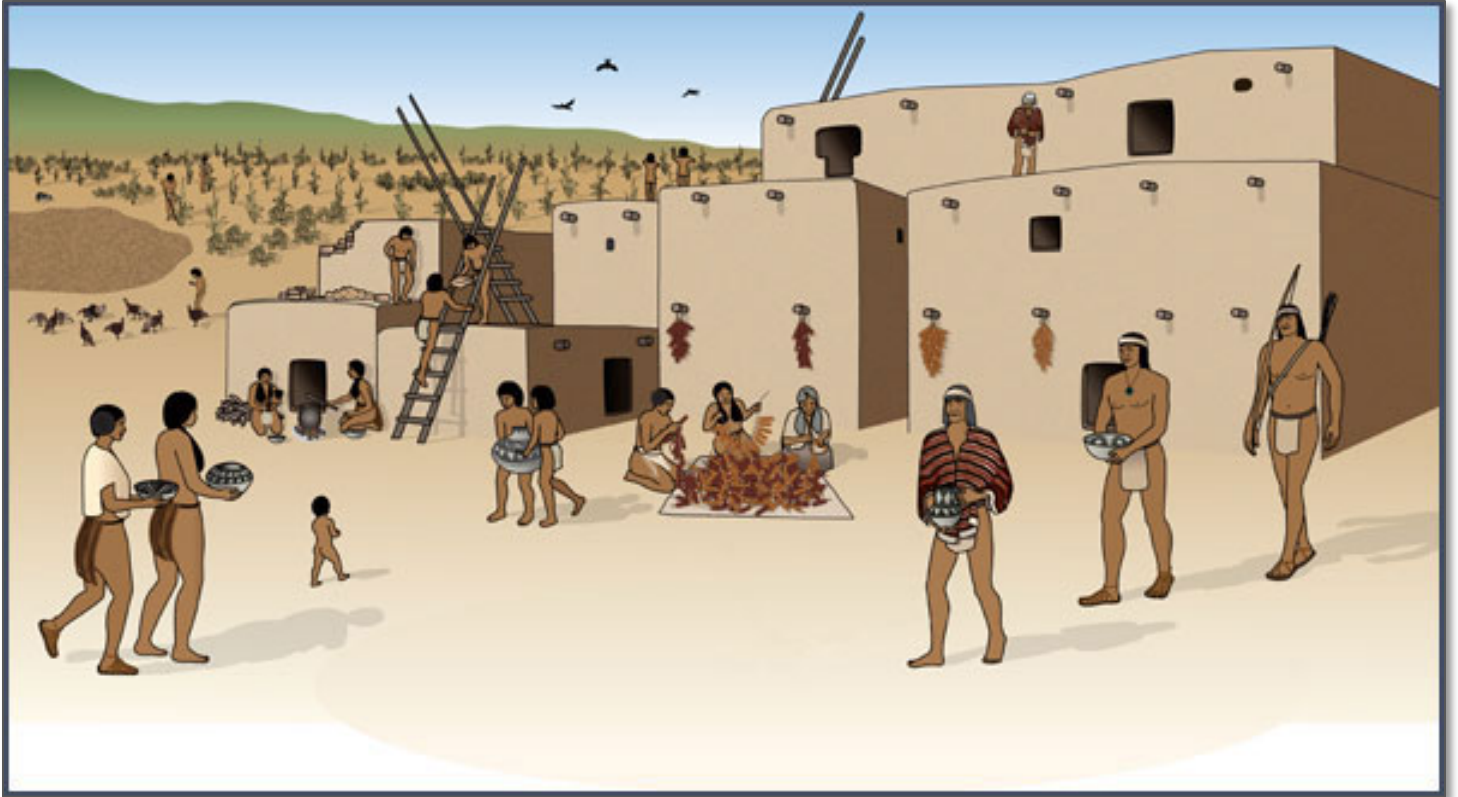
Citation

“Photo Shoot Image #107,” US Bureau of Land Management Anasazi Heritage Center. Copyright Crow Canyon Archeological Center.

Annotation

This photograph shows a selection of red ware pottery vessels known as San Juan Red Ware. During the Pueblo I period (A.D. 750–900), the residents of southwestern Colorado produced gray ware cooking and storage jars as well as black-on-white vessels, but red ware vessels such as those pictured above were traded into southwestern Colorado and were used widely in this area during this period. San Juan Red Ware vessels were produced only in southeastern Utah, and recent research on the composition of the paste suggests that the clay source for these vessels is located in the vicinity of the modern town of Blanding, Utah. The color of this pottery resulted from an oxygen-rich atmosphere that caused the iron in the clay to turn the vessel orange during firing. White ware vessels produced in Colorado were fired in a neutral atmosphere that was not rich in oxygen, and those vessels did not turn orange. Red ware vessel forms that were produced include the following: bowls, which were probably used for mixing and serving food; seed jars (left and right, near row), which were probably used to store dry foods such as nuts, seeds, berries, and medicinal plants; and ladles (center, near row) which could have been used to scoop or dip various liquid and solid foods. Archaeologists call the pottery types pictured above Abajo Red-on-Orange (bowl and seed jar at right), Deadmans Black-on-Red (ladle), and Bluff Black-on-Red (remaining three vessels).

Archaeologists study material remains to find answers to questions about the past. Many questions begin with the word “who” or “what” or “when” or “how,” such as “who produced the early red ware pottery found at sites in southwestern Colorado?” or “what type of clay was used to make these vessels?” or “when were these vessels produced?” However, questions that begin with the word “why,” such as “why did people in southeastern Utah produce red ware pottery?” or “why did the residents of Colorado like these red ware vessels?” or “why did people in southeastern Utah eventually stop making red ware pottery?” are much more difficult for archaeologists to answer, because the reasons people do things is not preserved in material remains for archaeologists to find.



6 / Primary Sources /Ancestral Puebloans

Pueblo II Lifeways

Citation

“Pueblo II Chacoan Great House,” based on original artwork by Theresa Breznau, Living Earth Studios, courtesy of the US Bureau of Land Management Anasazi Heritage Center, available online from Crow Canyon Archeological Center at:
http://www.crowcanyon.org/EducationProducts/peoples_mesa_verde/pueblo_II_overview.asp

Annotation

This artist’s reconstruction* depicts Pueblo life during the Pueblo II period (A.D. 900–1150). As the climate once again became favorable for maize cultivation in the A.D. 1000s, farming families returned to southwestern Colorado and constructed clusters of farmsteads in upland areas. Some communities constructed great kivas for gatherings and ceremonies. Also during this period, influence from Chaco Canyon in northwestern New Mexico resulted in the construction of numerous “great houses” in southwestern Colorado (pictured above), which were used for special but still poorly understood purposes that probably included community-wide events, storage, and long-distance trade. The scene above features community members engaging in feasting activities.

However, the typical residence was a farmstead consisting of one or more subterranean dwellings and a one-story roomblock. During this time span, subterranean dwellings transitioned from earth-walled pithouses to masonry-lined structures called “kivas,” which shared many internal features with pithouses. In addition to the masonry lining, an important difference between pithouses and kivas was that the roofs of kivas, rather than being supported by vertical logs, were supported by masonry columns that rested on a bench located around the inside wall of the structure. Kivas in historic and modern-day pueblos in New Mexico and Arizona (see Source 15), are used mostly for ceremonial purposes and mostly by men. However, archaeological evidence indicates that ancient kivas in southwestern Colorado were the primary residences of farming families, and these structures were used for many domestic activities as well as for household rituals. And although post-and-adobe construction continued into the Pueblo II period, most roomblocks were constructed of coursed stone masonry by the end of this period.

Another important development during this period was that people began eating domesticated turkeys for the first time, perhaps as a consequence of the increasing depletion of game and wild plant foods. Other aspects of Pueblo life, such as tools and other material goods, continued virtually unchanged during this time, although pottery styles and designs evolved and became more elaborate and detailed (see Source 7).

Archaeologists end the Pueblo II period at A.D. 1150, which was midway through the longest and worst drought the Pueblo people ever experienced in southwestern Colorado. This drought began about A.D. 1130 and lasted until approximately A.D. 1180. Similar to settlement events at the end of the Pueblo I period, the population of the area declined during this drought, and violence that probably resulted from competition for sparse resources escalated between communities.

* See Source 2 for note on the role of artist’s reconstructions as sources for conveying archeological information.



7 / Primary Sources /Ancestral Puebloans

Pueblo II Pottery

Citation

“Photo Shoot Image #168,” US Bureau of Land Management Anasazi Heritage Center. Copyright Crow Canyon Archeological Center.

Annotation

This photograph depicts some types of vessels that were produced during the Pueblo II period (A.D. 900–1150), including water jars (back row), bowls that could have been used for mixing and serving (center row), ladles (front row, left and center), and, for the first time, mugs (right front) were produced. Ladles could have been used to dip liquids or dry ingredients during food preparation, or to dip water from a spring into a water jar, or to transfer food from a cooking vessel to a serving vessel. The vessels in this photo are of a type archaeologists call Mancos Black-on-white. The vessel shaped like a duck (center, top row) and vessels depicting living things, such as the bowl (left) with a snake painted design, and the bowl with the human painted figure (right), are unusual for any time period in this area and might have been used for special purposes. Mugs could have been used for drinking water or other liquids or to contain individual servings of soup, stew, or maize gruel. Their relative scarcity might indicate ritual rather than everyday domestic use.

It is seldom possible for archaeologists to determine, from material remains, why pottery vessel styles and designs changed through time. However, among ancestral Pueblo Indians, ideas regarding the proper decoration elements during particular periods of time were widespread and shared, and potters were motivated to conform to the current styles. This conformity allows archaeologists to use specific pottery styles to date sites. This type of dating is possible only after the pottery styles themselves have been dated through their association with timbers that have been dated through dendrochronology (see Source 14).



8 / Primary Sources /Ancestral Puebloans

Pueblo III Lifeways

Citation

“Late Pueblo III Canyon-Head Village,” based on original artwork by Theresa Breznau, Living Earth Studios, courtesy of the US Bureau of Land Management Anasazi Heritage Center, available online from Crow Canyon Archeological Center at:

http://www.crowcanyon.org/EducationProducts/peoples_mesa_verde/pueblo_III_overview.asp

Annotation

This artist’s reconstruction* depicts a large canyon-head village constructed during the Pueblo III period (A.D. 1150–1280), when the population of southwestern Colorado peaked, and the Mesa Verde cliff dwellings were built. Early in this period, after a severe drought ended about A.D. 1180, the population of southwestern Colorado quickly surged to unprecedented levels—as many as 20,000 people. For about the next 70 years, many communities dotted the landscape, most consisting of farmsteads clustered around a larger central settlement on rolling uplands with good farming soils. Many aspects of Pueblo life continued much the same as previously: the cultivation of maize, beans, and squash (upper right corner); the gathering of wild plant foods; the use of cotton for clothing and blankets (left and center, foreground), the production of a wide variety of pottery vessels (left, foreground), the use of basketry containers (right, foreground), the construction of masonry-lined kivas and masonry roomblocks; and the use of grinding tools such as the mano and metate (right, foreground). Domesticated turkeys, which were fed maize, formed an ever-greater portion of the diet as game such as mule deer became sparse through over-hunting.

By about A.D. 1250, residents of many communities left their farmsteads to construct new homes within large villages that were forming near water sources, most of which were springs (cottonwood tree, right center) at the heads of canyons or in canyon alcoves. These new settlements were family-centered groups of kivas and rooms, and included multiple-story buildings and one or more public structures such as a great kiva. Many of the canyon-head villages were constructed with tall, stone enclosing walls with few openings; cliff dwellings were located in concealed locations and were difficult to reach. Their locations near springs and their protective or defensive characteristics suggest that these new settlements were constructed with a concern for defense.

A severe drought that began about A.D. 1276 added to the struggles that the residents of these villages were already experiencing. Food shortages and violence that appears to have been between Pueblo communities escalated, and most residents departed from southwestern Colorado (group at left, center) by about A.D. 1280. Pueblo families migrated to various destinations to the south, southeast, and southwest, joining established communities or founding new villages in New Mexico and Arizona, where many of their descendants live today.

* See Source 2 for note on the role of artist’s reconstructions as sources for conveying archeological information.



9 / Primary Sources /Ancestral Puebloans

Pueblo III Pottery

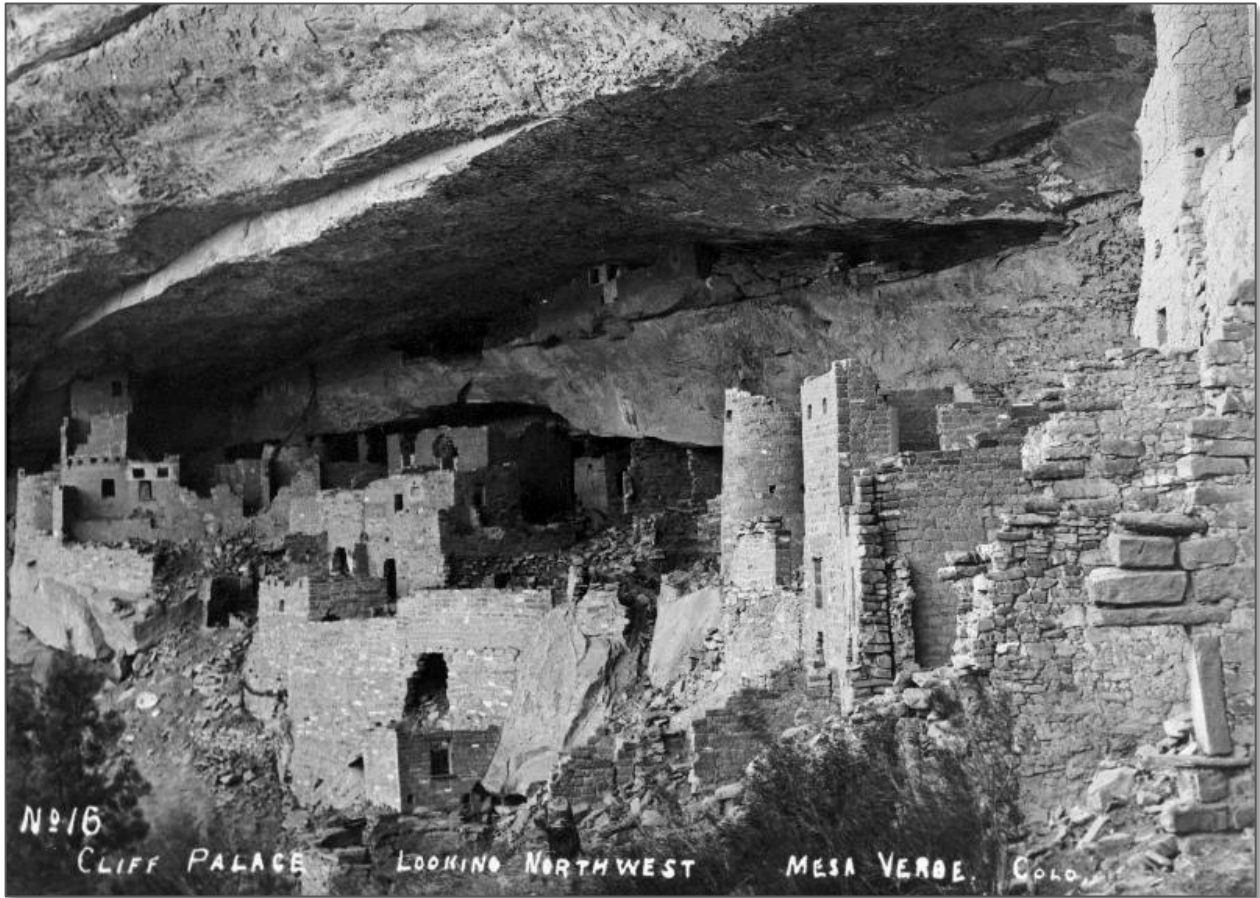
Citation

“Photo Shoot Image #320,” US Bureau of Land Management Anasazi Heritage Center. Copyright Crow Canyon Archeological Center.

Annotation

This photograph shows pottery vessels typical of those produced during the Pueblo III period (A.D. 1150–1280). These types of vessels were the latest and most elaborately decorated types of prehistoric vessels produced in southwestern Colorado. Bowls (left, middle row and right, front row), ollas (right), kiva jars (center), mugs (left, front), and canteens (right, middle row) were also produced, and these painted forms are of a type called “Mesa Verde Black-on-white” by archaeologists. Bowls were probably used for mixing and serving food. Both kiva jars and mugs were produced only during this period. Kiva jars feature a lip around the rim for holding a lid and could have been used for storing food or other objects. Mugs might have been used for drinking water or other liquids, and their scarcity suggests ritual use. Canteens might have been used to transport small amounts of water or other liquid for individual consumption while away from the residence. Cooking and storage jars (center and right, top row) were indented with the thumbnail of the potter and are called “corrugated” by archaeologists. The walls of white ware vessels made during this period were thicker and their rims were more squared-off in profile than white ware vessels produced during earlier periods, which might have made them less fragile.

Corrugated jars produced during this period feature very everted rims, and archaeologists call this style Mesa Verde Corrugated. Research comparing the utility of plain gray cooking jars that were produced earlier (see Source 3) found that potters and cooks might have changed to corrugated cooking jars because they required one-third less time to produce, and because, during normal use, corrugated jars last longer than plain gray jars.



10 / Primary Sources /Mesa Verde National Park Cliff Palace, Late 1800s

Citation

Thomas McKee, "Cliff Palace Looking Northwest, Mesa Verde, Colo." (c. 1890-1900), Historical Photographs of Mesa Verde National Park, MEVE 9084, TM-36, US National Park Service.

Annotation

This historic photograph depicting Cliff Palace, the largest Mesa Verde cliff dwelling, was taken in the late 1800s, a short time after it was discovered by Euro-American settlers and before Mesa Verde was declared a national park by Congress in 1906 (see Source 11). This image shows the remains of the village much as they looked after the 600 years of natural collapse and deterioration that occurred after the departure of the residents about A.D. 1280. Visible in this image is abundant rubble that resulted from the collapse of many structure roofs and stone walls.

Built mostly between A.D. 1260 and 1280 by the ancestral Pueblo people (see Source 8), this was the largest cliff dwelling ever constructed in North America. In the middle A.D. 1200s, families who lived on the mesa top left their farmsteads to construct new homes in this and other alcoves at Mesa Verde. The reasons for this settlement shift are not completely understood by archaeologists, but might include a desire for increased security and for homes that were more defensively positioned near springs in a climate of increasing social tensions and competition for resources.

At its peak, Cliff Palace contained 23 kivas and 150 rooms, and the settlement was home to an estimated 100 to 120 residents. These families raised flocks of domesticated turkeys and cultivated crops of maize, beans, and squash on the mesa top above this large alcove; wild plants and animals were also exploited for food. Water was obtained at a small spring within the alcove and possibly at other springs nearby.

Cliff Palace and all other ancestral Pueblo settlements in southwestern Colorado were vacated shortly after A.D. 1280. Factors that influenced migrations from the area include a severe drought that began in A.D. 1276 and lasted until 1299 and that resulted in food shortages across the region, as well as escalating violence between Pueblo communities that was probably associated with competition for increasingly limited resources. These and possibly additional conditions and factors influenced Pueblo peoples to depart from their beautiful stone villages and this landscape that had been their homeland for more than a millennium. Today, their descendants live in pueblos in New Mexico and Arizona (see Source 15).

THE BARON IN TROUBLE.

A Swedish Vandal Arrested for Destroying Relics of Cliff Dwellers.

DURANGO, Sept. 18.—Baron Nordenskiöld, of Stockholm, Sweden, was arrested at the Strater hotel last night by Deputy United States Marshal Sargent, charged with robbing the cliff dwellings on the Ute Indian reservation, of relics, etc. The information was furnished by Agent Bartholomew, who came up from Ignacio for this purpose. The Indians have often reported and warned the Swedish baron.

The baron came here direct from Sweden about six weeks ago and obtained permission to go on the reservation to explore the ruins of the cliff dwellers, but with the understanding that he was not to molest or remove anything. Contrary to this, it seems that the baron fitted out a party of eight men and went at once to digging and tearing down these ancient ruins, gathering an immense amount of relics of pottery, skeletons and implements, boxing them and shipping by express to New York, where they were to be shipped, and the work has been one of general devastation to these interesting landmarks of a race long dead. The baron is held, awaiting the action of the proper authorities.

11 / Primary Sources /Mesa Verde National Park

Gustaf Nordenskiöld and the American Antiquities Act

Citation

"The Baron in Trouble," *Herald Democrat* (Leadville, CO), Sept. 19, 1891, p1. Available online from Colorado Historic Newspapers Collection.

Annotation

This newspaper article, published in the *Herald Democrat* in Leadville, Colorado, on September 18, 1891, tells of the arrest in Durango, Colorado, of Gustaf Nordenskiöld, a scientist from Sweden. Nordenskiöld, as part of wider travels across the US during the summer of 1891, came to southwestern Colorado intending to spend a week with the Wetherill brothers and visit Mesa Verde cliff dwellings. Cliff Palace and numerous other large cliff dwellings had been discovered by the Wetherills a few years earlier. The Wetherills, a large ranching family, were among the first Euro-Americans to settle in southwestern Colorado, and their interest in the ruins led to years of excavating and collecting in many of the cliff dwellings. Nordenskiöld quickly became so interested in the dwellings, the artifacts, and the people who left them behind that he excavated as well, applying skills and principles he had learned in geology and creating records he would use to author perhaps the first major report on archaeological excavations in the US.**

On September 16, as Nordenskiöld prepared to ship numerous large crates of antiquities from the cliff dwellings home to Sweden, he was arrested in Durango, and the antiquities were seized. Many residents of Colorado were outraged that he was taking these materials out of the US. However, charges were dropped and the antiquities were released shortly thereafter, when Nordenskiöld's lawyer pointed out to the officiating judge that his client's actions were not illegal. The collections reached Sweden and eventually became stored in the National Museum of Finland in Helsinki, where they remain today. Other objects and collections removed from the cliff dwellings were sold by the Wetherills to museums, but many others were sold to private individuals and are now lost forever to research and public education.

Two important actions by the federal government in June 1906 can be tied to the widespread, unregulated digging of the Mesa Verde cliff dwellings and the removal of many antiquities from the US in the late 1800s. First, Congress passed the American Antiquities Act, the first federal legislation designed to protect antiquities on lands owned or controlled by the US government. Second, Congress created Mesa Verde National Park to place the cliff dwellings under government control and to protect the cliff dwellings and other ancestral Pueblo sites on the mesa from further nonprofessional excavations. These two actions effectively brought the ruins at Mesa Verde under the protection of the

* Gustaf Nordenskiöld's study was published in 1893 as *The Cliff Dwellers of the Mesa Verde, Southwestern Colorado: Their Pottery and Implements* (Stockholm: P.A. Norstedt and Söner), translated by D. L. Morgan and reprinted by Rio Grande Press, Glorieta, New Mexico, 1979.

government and set the stage for the professional management and development of these resources for the benefit of the public.



12 / Primary Sources /Mesa Verde National Park Cliff Palace Today

Citation

Courtesy of the author, Kristin A. Kuckelman.

Annotation

This photograph shows visitors learning about ancestral Pueblo people during a tour of Cliff Palace, the largest cliff dwelling at Mesa Verde National Park and one of the most famous archaeological sites in the world. This image reflects the condition of the cliff dwelling after the site was cleared of rubble from collapsed walls and roofs, walls were stabilized, and the site was developed for visitation. A great deal of preservation work was conducted at this and many other cliff dwellings after Mesa Verde National Park was created in 1906 by President Theodore Roosevelt and the National Park Service was established in 1916 by President Woodrow Wilson (compare image with Source 11). Today, more than half a million people each year learn about the ancestral Pueblo occupation of southwestern Colorado by visiting the museums and sites at Mesa Verde National Park and experiencing these spectacular ruins for themselves.

However, only a small proportion of the ancestral Pueblo residents of southwestern Colorado ever lived at Mesa Verde. For example, although constructed at the same time, many canyon-head villages northwest of Mesa Verde were larger than Cliff Palace. At its peak, Cliff Palace housed about 100 to 120 residents, whereas the largest canyon-head villages each housed an estimated 500 to 800 residents (see Source 8). The scientific, educational, and tourism value of Cliff Palace and the other cliff dwellings at Mesa Verde thus lies not in the quantity of sites, the size of these settlements or even in the relative importance of these villages during ancestral Pueblo times, but in the remarkable architectural preservation, the stunning alcove settings, and the dry, protected environments that resulted in the preservation of many types of perishable artifacts that are not typically preserved at open sites. These factors led to the creation of Mesa Verde National Park, a designation that provides the enormous resources necessary for the development, maintenance, preservation of these sites and for the interpretation of the archaeological content necessary for tourism and other educational purposes.

Knowledge of past peoples such as the ancestral Pueblo Indians of southwestern Colorado depends upon meticulous, long-term scientific study of the remains of these cultures, which is not possible without the protection, preservation, conservation, and thoughtful management of these precious cultural resources. During the widespread relic hunting in the Mesa Verde cliff dwellings in the late 1800s (see Source 11), an enormous quantity of unique, invaluable, and irreplaceable contextual data such as stratigraphy, fragile vegetal food remains, and precise locational information were destroyed forever.

Although federal laws now protect archaeological sites on public lands, few looters today are apprehended or prosecuted. The many thousands of sites that are located on private lands are controlled by landowners, who are free to preserve, dig, or destroy these precious deposits at will. The future preservation of cultural resources rests with the education of the lay public to increase awareness of the value of archaeological sites, which contain the unique ability to inform us through empirical, scientific data about the ancestral Pueblo Indians and the people of other cultures who inhabited the southwestern corner of Colorado and who played such a prominent role in the prehistory of our state.



13 / Primary Sources /Modern Archeological Practices Archeological Excavation

Citation

“Photo 7806, Kiva 1004, Sand Canyon Pueblo,” copyright Crow Canyon Archeological Center.

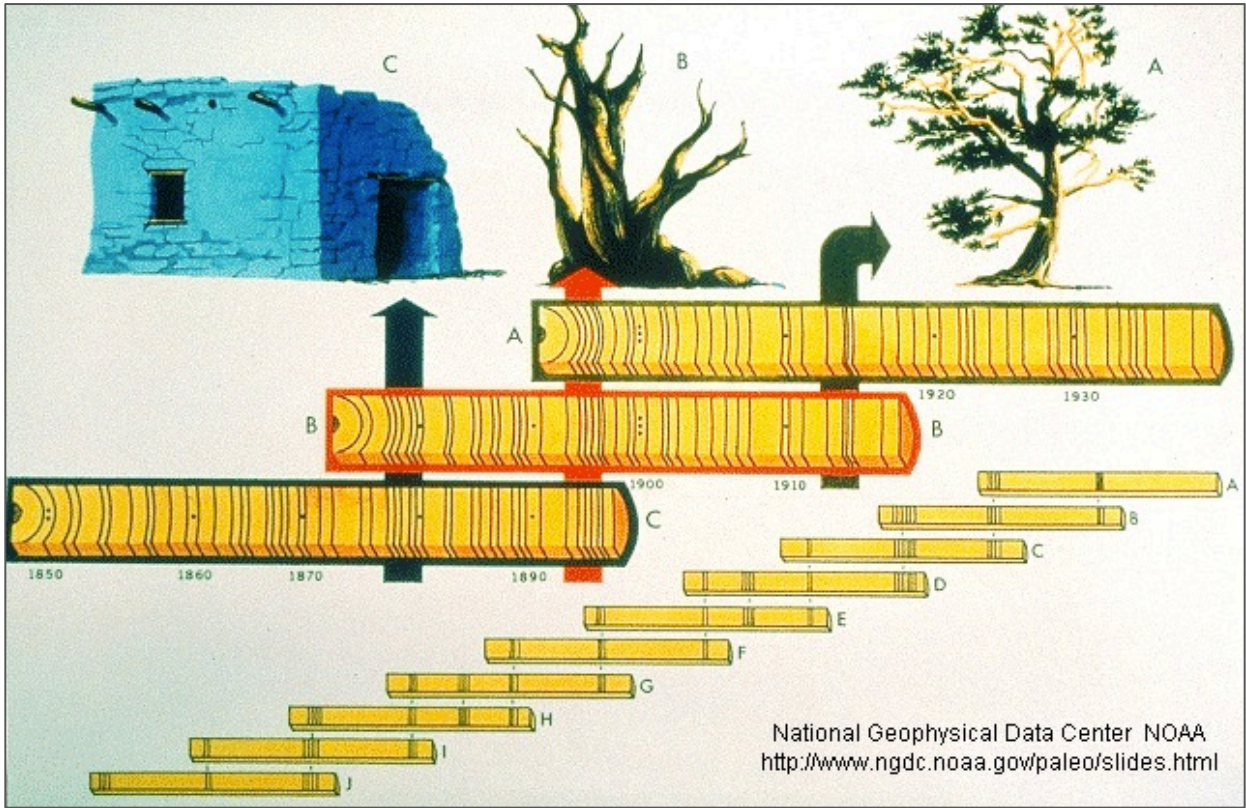
Annotation

This photograph depicts modern archaeological excavations in an ancestral Pueblo kiva (keyhole-shaped structure on right) and two adjoining rooms (left) at Sand Canyon Pueblo. The Crow Canyon Archaeological Center conducted excavations at this large, canyon-head village located in southwestern Colorado. Tree-ring dates indicate that this village was constructed and occupied during the late Pueblo III period (A.D. 1250–1280). The architecture, artifacts, plant and animal remains, and other materials recovered during excavation contributed a great deal of new information about the lives and conditions of the residents just before the region was permanently depopulated by Pueblo peoples about A.D. 1280.

Archaeology and other types of anthropological research provide the only means of learning about prehistoric cultures, that is, peoples who lived before written records. Approximately 99 percent of our human past occurred before written records were created. Archaeology thus fills an important niche in obtaining knowledge of the peoples who lived in the past.

Nevertheless, many factors limit what we can learn about peoples in the past through archaeological methods of inquiry and the remains found at sites. For example, people in the past took many of their possessions with them when they left a habitation, and those objects will then not be found during archaeological excavations. Among items that are left at a habitation, some are salvaged by other people living in the area or passing through the area. In addition, over long periods of time, organic remains disintegrate at sites that are not protected in dry alcoves. Artifacts such as wooden tools and structural supports, fiber mats, ropes, snares, twined bags, sandals, baskets, clothing, vegetal food remains, hides, bows, and items made from fur, feathers, or hair are not preserved at most sites. Materials that are preserved include complete or broken pottery vessels and anything made of stone (tools, debris from producing tools, ornaments). The preservation of bone depends upon the climate and the acidity content of the sediment at a particular site; bone preserves well in alkaline environments but not in acidic environments. Thus, although scientists can learn a great deal about past cultures through archaeology, there are also many questions that cannot be answered with archaeological data.





14 / Primary Sources /Modern Archeological Practices Tree-Ring Samples and Dendrochronology

Citation

Image #1727, Crow Canyon Archeological Center

Annotation

The photograph featured as source 14a shows burned timbers that were once part of a kiva roof at a large canyon-head site called Sand Canyon Pueblo. When the village was vacated by its residents, this kiva roof was set afire, and the charred remnants later collapsed onto the kiva floor. When archaeologists from the Crow Canyon Archeological Center excavated the kiva in 1989, they carefully exposed, removed, and tied these fragile burned timbers with string to keep them intact. These logs, which were now tree-ring samples, were then sent to the Laboratory of Tree-ring Research in Tucson, Arizona.

Analysts there identified the species of tree that the timbers were cut from and determined the year that each tree died by comparing the rings of these timbers to the master tree-ring sequence on file (see Source 14b). The analysts discovered that all of these timbers were cut from juniper trees. The dates from these samples informed archaeologists that this kiva was constructed, repaired, or remodeled in A.D. 1265, about 15 years before ancestral Pueblo people migrated from the village, and all of southwestern Colorado was left uninhabited.

The analysts used dendrochronology to date the timbers. Much of what archaeologists have learned about ancestral Pueblo peoples is attributable to dendrochronology (dendron = tree, chronos = time, ology = the study of). Also called tree-ring dating, this science aids archaeologists in two important ways: it reveals year-by-year environmental conditions in the past, and it provides the most precise method of dating prehistoric sites that is available today.

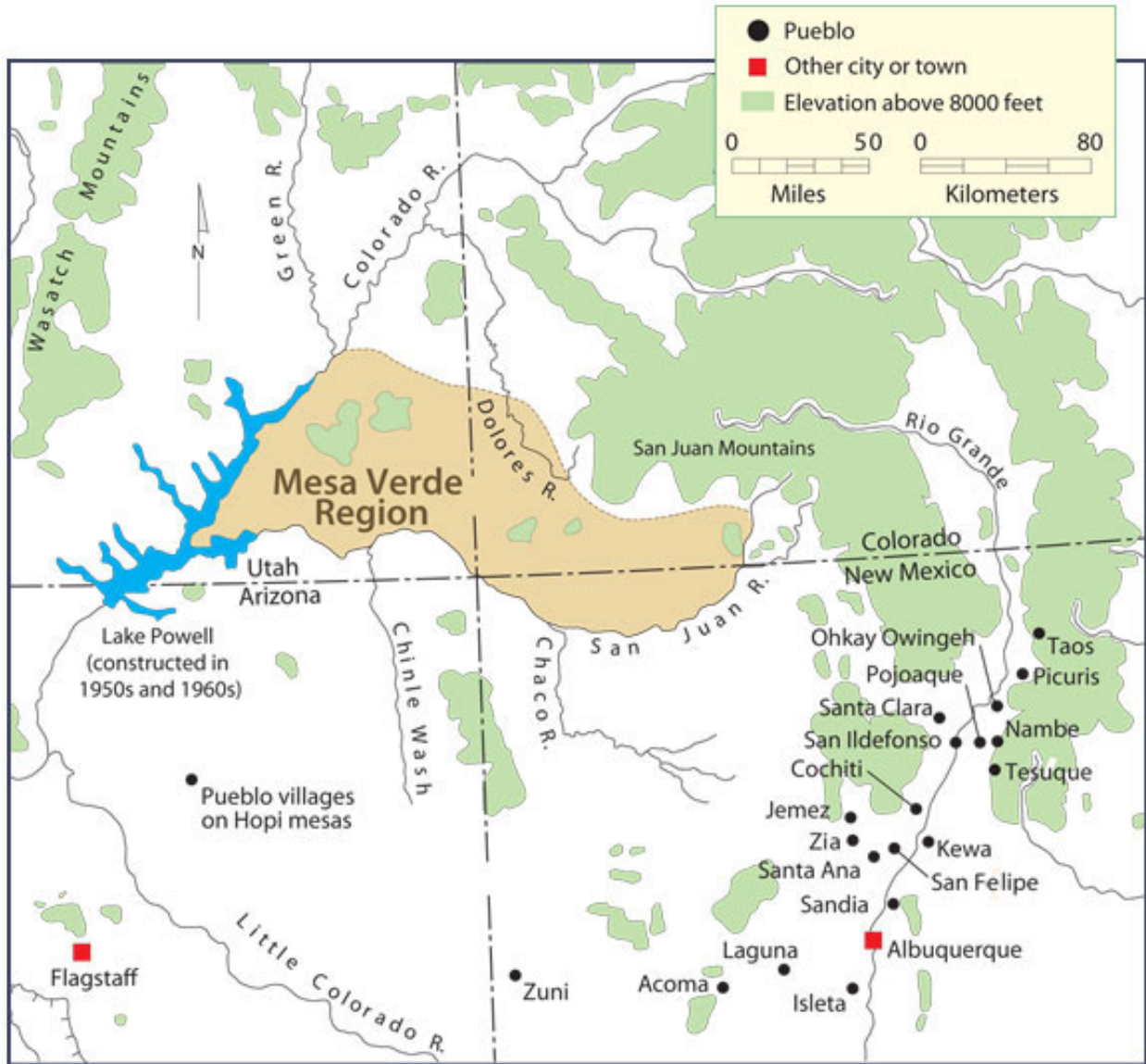
Source 14b illustrates how dendrochronology works. Living trees add one growth ring each year. Favorable growing conditions, especially adequate precipitation, result in wide growth rings, and unfavorable growing conditions, especially drought, result in narrow rings. Across the Southwest, the growth rings of trees are similar for a given year. A long-term record of growth-ring width, or a master sequence, was constructed for the Southwest through cross-dating, a principle illustrated in the graphic above.

The process of cross-dating begins by documenting the ring pattern of a living tree; the outermost ring reflects the current, known year. The ring pattern consists of a unique series of rings of varying widths for as far into the past as that tree has been living, and drought years can be detected and dated. The sequence can be extended further into the past by recording the ring pattern of a dead tree whose ring pattern clearly *overlaps* the early part of the ring sequence of the live tree. Now the exact calendar year that the dead tree died can be determined, and drought years during the life of the dead tree can be also detected and dated.

The ring patterns of dead trees and other wood that lived and died successively earlier can be used to extend the master sequence further and further into the past, and every ring can be tied to a specific calendar year. A basic master sequence for the Southwest that was tied to our modern calendar was completed in 1929, when, for the first time, the construction of the ancestral Pueblo habitations in southwestern Colorado and elsewhere across the Southwest could be dated. This accomplishment changed Southwestern archaeology forever. The master sequence for southwestern Colorado now extends approximately 2,000 years into the past.

Archaeologists in southwestern Colorado and elsewhere in the Southwest use the master tree-ring sequence by collecting wood such as a roof beam from an ancient structure and sending it to the Laboratory of Tree-Ring Research in Tucson, Arizona, where analysts determine what year that tree died by matching the ring series from the ancient structure to its uniquely correct place on the master sequence. The year the tree died provides important information about when a structure was built and when a settlement was occupied. In addition, archaeologists use dendrochronological information about precipitation, especially years of drought or periods of adequate rainfall, in their study of many aspects of the lives of ancient farmers.

And the importance of dendrochronology reaches far beyond those uses. Many archaeological sites in southwestern Colorado do not contain preserved wood and so cannot be dated using dendrochronology. However, particular styles of architecture, pottery, projectile points, and other types of artifacts have been found associated with wood that has been tree-ring dated, and now the presence of those styles can be used to date sites. In fact, every method of dating archaeological sites in the Southwest depends, either entirely or partly, on dendrochronology.



15 / Primary Sources /Ethnographic Analogy: Historic Pueblos in the Modern Era

Map of Modern Pueblo Locations

Citation

Crow Canyon Archeological Center, "Pueblos in New Mexico and Arizona Today," available online at http://www.crowcanyon.org/EducationProducts/peoples_mesa_verde/images/map_pueblos_today.asp. Copyright Crow Canyon Archeological Center.

Annotation

This map shows the names and locations of pueblos in New Mexico and Arizona today. Many residents of these 20 villages are among the descendants of the ancestral Pueblo Indians who occupied southwestern Colorado in prehistoric times. Numerous pueblos cluster near the Rio Grande River; some immigrants from Colorado in the late A.D. 1200s might have chosen to re-settle near this large, permanent water source. The two oldest villages are thought to be the pueblo of Walpi, a village on one of the Hopi mesas in northeastern Arizona that dates its founding to about A.D. 900 (see Source 16), and the pueblo of Acoma in New Mexico, founded in the A.D. 1100s.

Information about past cultures can sometimes be obtained through ethnographic analogy. With this method of research, archaeologists can gain insight into past cultures by studying historic cultures. In the Southwest, the lifeways of historic and modern Pueblo peoples, descendants of ancestral Pueblo farmers, are important sources of knowledge about prehistoric Pueblo groups. However, archaeologists must use caution when utilizing this method, because cultures evolve continuously and can change in significant ways over the course of many centuries.



16 / Primary Sources /Ethnographic Analogy: Historic Pueblos in the Modern Era Historic Walpi

Citation

Adam Clark Vroman, "Walpi from South" (c. 1900), available online at <http://www.webpages.uidaho.edu/~rfrey/images/329/Hopi/General/Walpi-from-the-south-w.jpg>

Annotation

This photograph of Walpi, a Hopi pueblo located atop narrow First Mesa in northeastern Arizona, was taken about 1900. This village was founded on this high, narrow mesa, reportedly for defensive purposes, about A.D. 900 and has been occupied continuously for more than 1100 years. The pueblo was thus founded about 300 years before the construction of Cliff Palace at Mesa Verde began. Similar to late ancestral Pueblo villages in southwestern Colorado, most structures at Walpi are constructed of stone masonry, and the village contains kivas, multiple-story masonry rooms, and designated refuse areas. Today, few permanent residents live in the village, which, by the choice of its residents, still has no electricity or running water. However, the structures are maintained and are important locations for traditional ceremonies for the pueblo residents of nearby villages.



17 / Primary Sources /Ethnographic Analogy: Historic Pueblos in the Modern Era Corn Grinding

Citation

William Henry Jackson, "Indian Women Grinding Corn" (c. 1882-1900), Denver Public Library Western History and Genealogy Department, CHS.J1737. Available online at <http://digital.denverlibrary.org/cdm/singleitem/collection/p15330coll21/id/7962/rec/80>.

Annotation

This photograph shows Pueblo women in the late 1800s at a Hopi village in northeastern Arizona. The young women are grinding corn using manos and metates similar those used in ancestral Pueblo times. These tools were crucial for food processing and thus essential to the survival of ancestral Pueblo people, who used them to grind maize kernels and wild seeds on a daily basis. The metates shown here are seated within bins made of vertical slabs; similar mealing bins or metate bins are commonly found at ancestral Pueblo sites in Colorado dating from the Pueblo II and Pueblo III time periods (A.D. 900–1280). A basket of coarsely ground cornmeal can be seen in the left foreground. Ears of multi-color corn are visible in the right foreground; today, corn is used for various purposes on the basis of its color. Manos and metates are still used today by some pueblo women, mostly to grind corn for ceremonies and rituals.

The women wear shawls over their dark-colored, traditional garments called *mantas*, which are always worn passing beneath the left arm and on top of the right shoulder. The "butterfly-whorl" hairstyle seen here is also visible in prehistoric rock art panels in the Four Corners area and thus has a very long tradition among the Hopi; this elaborate hairstyle announces to everyone that these women are unmarried.



18 / Primary Sources /Ethnographic Analogy: Historic Pueblos in the Modern Era Basket Weaving

Citation

William Henry Jackson, "Moki Basket Weaver" (c. 1890-1910), Denver Public Library Western History and Genealogy Department, CHS.J4228. Available online at <http://digital.denverlibrary.org/cdm/singleitem/collection/p15330coll21/id/14234/rec/79>

Annotation

In this photograph, a Pueblo woman sits on a large woven blanket and produces a variety of baskets at her home on the Hopi mesas in northeastern Arizona in the late 1800s or early 1900s. Her hairstyle is wrapped braids, which was a traditional style of married women. She wears a traditional garment called a *manta*, which is always worn passing beneath the left arm and on top of the right shoulder.

Basketry formed an essential element of ancestral Pueblo culture in southwestern Colorado from the earliest occupation of the area by Pueblo peoples. Before the introduction of pottery, baskets lined with pitch were used for transporting water and for cooking. To cook food such as soup or stew, rather than placing a basket over a fire, heated rocks were dropped directly into the liquid contained in the basket.

Baskets continued to be used for a wide variety of purposes even after the introduction of pottery into the area. Baskets weigh much less and thus easier to transport than pottery vessels, and, unlike pottery, they didn't break when dropped. Baskets were probably used to contain and transport crop foods and wild plant foods on a daily basis, and burden baskets would have been used to carry various belongings during extended trips away from settlements and during migrations.



19 / Primary Sources /Ethnographic Analogy: Historic Pueblos in the Modern Era Pottery Making

Citation

William Henry Jackson, "Moki Pueblo, Woman Making Pottery" (1899?), Denver Public Library Western History and Genealogy Department, CHS.J2845. Available online at <http://digital.denverlibrary.org/cdm/singleitem/collection/p15330coll21/id/8798/rec/2>

Annotation

This photograph, taken about 1899, shows a Pueblo woman in northeastern Arizona making pottery. Producing a vessel in her lap, she takes materials for her pot from a stone slab nearby. She wears a traditional *manta* and the wrapped braids typical of a married woman. The jars beside her on the ground are finished and have been fired in a kiln. A pile of firewood is visible to her right. The structure behind her might be constructed of adobe or might be stone masonry that has been coated with plaster. Pottery has been an important technology in Pueblo culture since its introduction into southwestern Colorado by A.D. 500 (see Source 3), and a variety of vessel forms quickly became incorporated into methods of storing, processing, preparing, cooking, and serving food; other specialty forms were developed for rituals and ceremonies. In historic times, tourism has created a market for Pueblo pottery, which supported a resurgence of pottery production and a lucrative cottage industry for Pueblo potters.

Additional Resources

Websites

Crow Canyon Archeological Center, "People's of the Mesa Verde Region,"

http://www.crowcanyon.org/EducationProducts/peoples_mesa_verde/intro.asp

US Bureau of Land Management, "Anasazi Heritage Center," <http://www.blm.gov/co/st/en/fo/a hc.html>

US National Park Service, "Mesa Verde National Park," <http://www.nps.gov/meve/index.htm>

Laboratory of Tree-Ring Research, <http://ltrr.arizona.edu/>

Articles

Andrew Ellicott Douglass, "The Secret of the Southwest Solved by Talkative Tree Rings," *National Geographic Magazine* (1929): 737-70. Available online at <http://ltrr.arizona.edu/content/secret-southwest-solved-talkative-tree-rings>

William J. Robinson, "Tree-Ring Dating and Archeology in the American Southwest," *Tree-Ring Bulletin* 36 (1976): 9-20. Available online at http://www.treeringsociety.org/TRBTRR/TRBvol36_9-20.pdf



Teaching Strategies

General Instructional Strategies for using primary sources in classrooms followed by grade-level-targeted suggestions for essential questions, inquiry questions (including writing prompts and discussion starters), activities, and assessments aligned to specific state academic standards for 4th grade, 8th grade, and high school.

4th Grade

Essential Questions:

- Where did the Ancestral Puebloan people live?
- Why is it important to know the sequence of events and people in Colorado history?
- How do historians study people who lived before written history?

Inquiry Questions (writing prompts or discussion starters):

- What factors cause people to move or relocate?
- What can we learn from the Ancestral Pueblos in regards to climate change today?
- Why is it important to protect archeological sites like Mesa Verde?

Activities:

Warm up/quick activities

- Activate background knowledge with a journal prompt: Ancestral Puebloan people lived in Colorado and the surrounding states between 3,000 and 750 years ago. By the time Europeans reached the southwestern United States, the Ancestral Pueblos had left their prehistoric homes, and those who were left had integrated into several other societies in the region. What reasons can you think of that might have caused them to move after living in the region for so long?
- Using Source 8, facilitate a discussion as to why the Ancestral Pueblos chose to build their residences on top of the plateaus/mesas. Have students divide into groups, choose a place to build their homes that they believe is best. Then create a short persuasive argument to convince the class as to where they should build their residences.
- Show Source 10 and Source 12 side by side. Ask the students why Cliff Palace looks so different in the older photograph. Have the students write a short opinion piece explaining whether they think archeological ruins should be rebuilt, or preserved as found.

Lesson activities

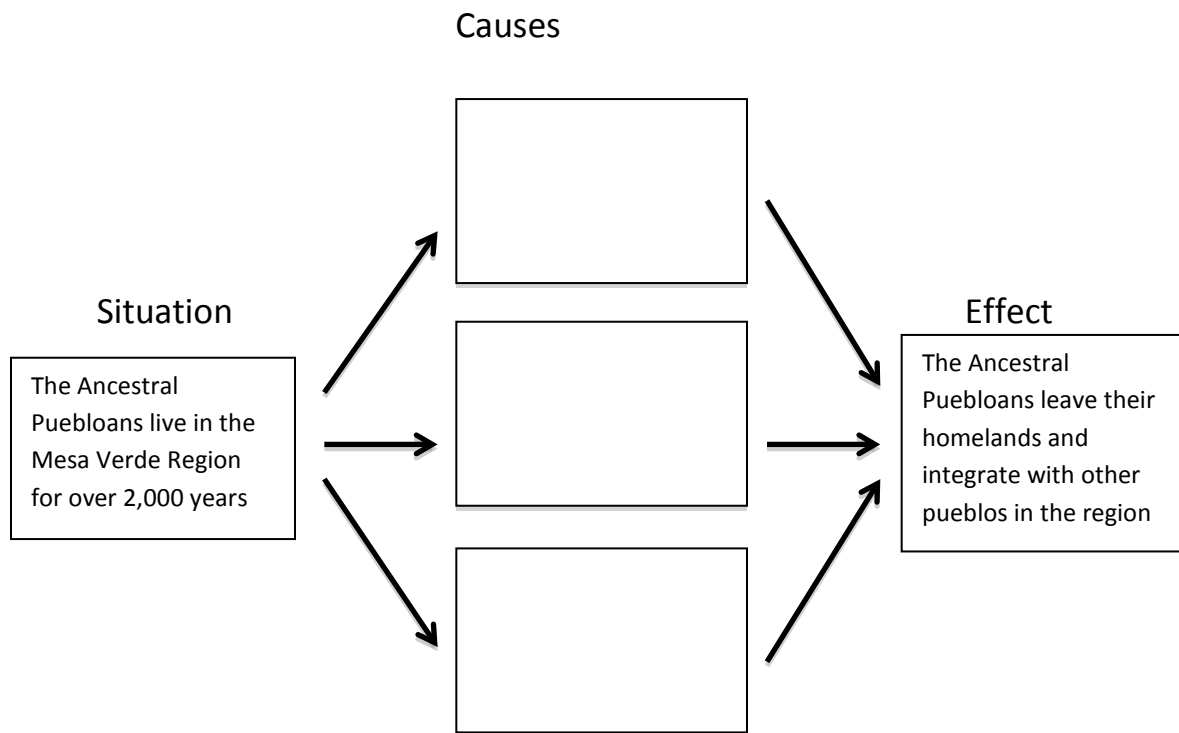
- Explain “Dendrochronology” and how it applies to our 4th Grade Life Science Tree Unit. Use an image such as <http://www.ucar.edu/learn/images/treesamp.gif> to create a pretend tree ring record that would end in the present day. Have students cut out the four “cores” from the sheet and glue them to a new sheet creating a completed dendrochronological timeline. Have the students plot significant events on their timeline such as their birth, their first day of kindergarten, President Obama’s first day in office, your birthdate, etc.
- Using Source 15, ask students to look at the location of the pueblos to which the Ancestral Pueblos relocated. What characteristics are similar throughout the location of most of the pueblos? (They are near the Rio Grande River). Why might the Ancestral Pueblos have chosen to leave their homes and join/start the pueblos in this new region? (a drought pushed them from their homeland toward more fertile land) Have the students work together in heterogeneous

groups to create a presentation for the class explaining why this change/move may have been necessary. Give each group a different source to reference from Sources 2, 4, 6, or 8. Have the students read the annotation and cite facts to defend their explanation as to why this change/move would have been necessary for the Ancestral Pueblos.

- Use primary sources to supplement the images in the book while reading Chapter 2, Lesson of [A Colorado Story](#). (<http://store.gibbssmitheducation.com/showproducts.cfm?WPCID=1298>)
- Have students write an essay explaining who the Ancestral Pueblos were, and what distinct characteristics they had that set them apart from the prehistoric people of Colorado. Students can use the primary sources and their annotations, as well as information from books specifically about the Ancestral Pueblos such as [The Old Ones](#) (<http://www.amazon.com/The-Old-Ones-Childrens-Anasazi/dp/0937871273>) or [The Anasazi](#) (<http://www.amazon.com/The-Anasazi-Eleanor-H-Ayer/dp/0802781845>).

Assessments (aligned with specific state academic standards for your grade level):

- To assess Geography Standard 1, give the students Source 1 and a current Colorado road map. Have them locate a current town that lies within the “Mesa Verde Region.” The students should then locate the town they live in, and write driving directions from their town to the town in the “Mesa Verde Region.” Student driving directions should include the names of the roads they would travel on, as well as the direction they would be going on those roads.
- To assess History Standards 1 and 2, students could complete a cause and effect graphic organizer which would ask them to identify reasons that the Ancestral Pueblos moved from their original settlements joined with other Native peoples across the southwest.



8th Grade

Essential Questions:

- How did culture, geography, politics, and economics impact the Ancestral Pueblo Indians of Southwestern Colorado at Mesa Verde?
- What is the role of archeology and preservation in history? Why is preserving history so important?
- How do the Ancestral Pueblo Indians of Southwestern Colorado illustrate the experience of other native peoples in Colorado?
- What are the lasting impacts of native peoples in Colorado, specifically, the Ancestral Pueblo Indians of Southwestern Colorado?

Inquiry Questions (writing prompts or discussion starters):

- Describe the ideal house. What types of things must you consider when building a house? If you could build a house anywhere that you would live in full-time, where would you build it?
- Suppose you are camping in Southwest Colorado and you are exploring the land around where you are camping. You find what appears to be an old piece of pottery in the dirt. What do you do next? Tell the story of its origins.

Activities

Warmup/quick activities

- Define the following terms: arid, topography, geology, weather, and climate.
- Watch *Colorado Experience: The Original Coloradoans* here: <https://www.youtube.com/watch?v=IWLdijamdcQ>. Use this short film to introduce the documents/study of native peoples in Colorado.

Lesson activities

- Listen to the podcast *America Before Columbus* by Charles Mann here-- <http://www.gilderlehrman.org/multimedia#!3312>. After listening to the podcast, write down 5 facts, quotes, or ideas that surprised you. Also, write one succinct statement to share with the class.
- Research life at Mesa Verde. Divide the class in groups at research different aspects of life at Mesa Verde—farming, social structure, economics, government, etc. Use the Mesa Verde National Park site <http://www.nps.gov/meve/index.htm> and <http://www.mesaverde.org> to begin research. The final research product will be made using the website www.smore.com to create flyers/posters about the aspect of life they researched.
- Analyze the native peoples map found here: http://www.manataka.org/images/Native_American_Tribes_Wall_Map_068L.jpg. What does the map tell you about where in Colorado Native Peoples lived? How did geography impact where people lived?

Longer activities

- Make pottery (multi-day assignment - cross curricular project with the art teacher/class) Have students analyze the primary source documents of pottery found at Mesa Verde, including the photo of the woman at Mesa Verde making pottery (William Henry Jackson, “Moki Pueblo, Woman Making Pottery”) and research the different types of pottery discovered and found at Mesa Verde—also read <http://www.collectorsweekly.com/native-american/pottery>. Each student should create an authentic piece of pottery based on research conducted. In addition, students will create a description and story to accompany their pottery.

Assessments (aligned with specific state academic standards for your grade level):

- Town Hall Native Forum- central question: What is the role of Native peoples in Colorado in 2015? Representatives from different native peoples in Colorado discuss their past, present and future in Colorado. Students are given different roles representing various native peoples in Colorado. Students research their role and act in a manner that is consistent with the way their role would act. Assistance/guest speaker from <http://www.colorado.edu/law/academics/programs/indianlaw> could potentially give assistance as to what issues Indians are currently facing.
- Locate Mesa Verde on a map and discuss the geography, topography and climate of Southwest Colorado. What geographic factors impacted the Indians most, for good or bad? What geographic features made Mesa Verde an ideal place to live? What geographic features made Mesa Verde a difficult place to live?
- Debate/Socratic Seminar- for assistance on how to run a Socratic Seminar click [here](https://www.facinghistory.org/for-educators/educator-resources/teaching-strategy/socratic-seminar) (<https://www.facinghistory.org/for-educators/educator-resources/teaching-strategy/socratic-seminar>) Central Question: Who owns or has the rights to historical artifacts? To prepare, have students read the document from the *Harold Democrat* in Leadville about the man arrested for stealing artifacts from Mesa Verde and check out the website for Mesa Verde National Park, <http://www.nps.gov/meve/index.htm>

High School

Essential Questions:

- How and why have the Puebloan cultures changed over the course of history?
- What lessons can we learn from the history of Ancestral Puebloans?
- Why do we study past civilizations and cultures?

Inquiry Questions (writing prompts or discussion starters):

- Why should we learn about people that have lived in Colorado before us?
- Do we need to save artifacts from past civilizations? What can they tell us about government, geography, and history?
- How would climate in Southwest Colorado play a part in the development of pottery?

Activities:

Warmup/quick activities

- Using source 11, describe the main idea of this passage. How did this event affect the study of Ancestral Puebloan life?
- Define and draw out the vocabulary pictures from the glossary, then handpick the best for a vocabulary assessment
- Examine documents 2, 4 and 6. What can you tell about the daily life of Ancestral Puebloans? What activities are similar to modern day economic activity?

Lesson Activities

- Examine documents 1 and 15: Compare these maps to a modern day map and identify cities, parks, and other important locations that exist today. Research and identify populations, climate, and economic activity that exist there today. Are there any similarities to the Ancestral Puebloans that can be identified?
- Using documents 10 and 12, in addition to your knowledge of Ancestral Puebloan life, explain why these structures were built in this way and in this location?
- Examine documents 17 and 18. Discuss how these activities are done today. What are the advantages and disadvantages of the old and new methods?
- Using sources 6 and 8, have groups of 3-4 write a brief description of the type of government that regulated Ancestral Puebloan life. Compare this to our government today. Discuss topics like law, politics, and economics. How were the basic economic questions of production answered? (What to produce, how to produce, and for whom to produce?)

Assessments (aligned with specific state academic standards for your grade level):

- Using documents 2, 4, 6, 8, and 10, write a 5 paragraph essay using key details to answer the following question: how did Ancestral Puebloans life change over time?
- Compare and contrast documents 11, 13, and 14a and have students make a short-constructed response to the following questions: What differences do you see in regards to how excavation was handled? Why the change?
- Have students draw two pictures. One picture should depict life of the Ancestral Puebloans. Another should depict life today in Colorado. Write a paragraph comparing and contrasting the life of Puebloans with that of the people who live in Colorado today.