

© Watercolors by Michael Hampshire

Ancestral Puebloans Background Information

The name Ancestral Puebloans is a name used to identify many historic cultures that resided in the southwest, and to whom many modern American Indian tribes have descended from. Looking specifically at the people who lived around or near the Flagstaff Area National Monuments, archeologists will find small variations in tools used, and ways of life depending on the location and time period they were used. However, it is understood that the people who lived here migrated and traded with each other and many have cultural ties to each other.

The earliest people to pass through these areas left few traces. Their only remains are hand-size figurines cached in a cave more than 3,000 years ago, surprisingly old for artifacts made from highly perishable willow branches. Some investigators think these split-twig figurines represent bighorn sheep and may have been part of an early hunting ritual. Similar figurines have been found in caves at the Grand Canyon

farther north.



By A.D. 600, early farmers had settled east of the San Francisco Peaks. They lived in small pithouse villages and farmed the open parks in the forest. Like many Pueblo communities of the American Southwest, the Ancestral Puebloans employed dry-farming techniques to harvest corn, squash, and beans in volcanic terrain. Otherwise known as the "three sisters," these crops were drought-resistant and ideal for dry farming, since corn can tolerate the sun and shade its lower growing sister crops, squash and beans, which do not require direct sunlight in order to thrive.

To irrigate these crops in the semi-arid climate, the Ancestral Puebloans built terraces and small rock check dams that allowed them to conserve rainwater. They also collected water from nearby sources of streams and creeks, and collected rain water. The Ancestral Puebloans did not rely on one strategy for collecting and gathering food alone; instead they preferred to use a combination of hunting, gathering, and farming. Major game animals hunted by the Ancestral Puebloans include pronghorn antelope, jackrabbits, cottontails, mule deer, and bighorn sheep. The Ancestral Puebloans also collected wild plant foods including piñon nuts, grass seeds, prickly pear and cholla fruit, agave hearts, and the berries and leaves of many shrubs.

A major portion of the Ancestral Puebloans diet did come from the products of their agricultural practices. Some practices included irrigation, floodwater farming at the mouths of arroyos, and dry farming. The Ancestral Puebloans had to make use of multiple strategies to survive.

^{*} Information contained here is a compilation of information taken from Western National Parks Association Publications, the National Park Service webpages associated with each park, and information written and compiled by Brian Crosby during an internship with the NPS. For more information please visit www.nps.gov or a national monument.



Walnut Canyon

Walnut Canyon resides at the southeastern edge of the San Francisco volcanic field, a geologic formation that contains over 400 cinder cone volcanoes, lava flows, and other volcanic formations. The San Francisco Peaks, the four summits of the extinct volcano just north of Flagstaff, is the most prominent feature of the San Francisco volcanic fields. The canyon itself was formed by the erosional processes from Walnut Creek, which flows northeast from Mormon Lake. Twenty miles long, 400 feet deep and ¼-mile wide, it was carved by Walnut Creek over a period of 60 million years. Within its winding walls are natural riches – an abundant mix of plants and animals drawn there by water and varied topography. It seems a timeless place.

The environment in the canyon can be divided into four unique ecological zones created by different moisture and temperature conditions that exist throughout the canyon. The north rim of the canyon mostly contains piñon pine and Utah juniper, the south facing slope features

mutton grass and sagebrush, the canyon bottom contains box elder and Arizona black walnut, while the north facing slope is dominated by Douglas fir. The direction of the sun on the slopes of the canyon creates the different zones because of the different amounts of sun and moisture the different zones receive.

Walnut Canyon looked very different when it was inhabited over 700 years ago. The rim of the canyon contained cultivated croplands created by the residents to sustain them. The water flows through the canyon would have been unrestricted by dams, and would have washed the soft sediment and vegetation that builds up on the canyon floor today, to wash downstream.

Walls of buff sandstone form the canyon's inner gorge; the rock contours reveal their origins in the wind-scoured dunes of an ancient desert. The limestone ledges of the upper canyon contain delicate marine fossils, remnants of a later sea. Much later, the people of this canyon built their sturdy homes in shallow alcoves along these ledges.



^{*} Information contained here is a compilation of information taken from Western National Parks Association Publications, the National Park Service webpages associated with each park, and information written and compiled by Brian Crosby during an internship with the NPS. For more information please visit www.nps.gov or a national monument.



<u>Wupatki</u>

Heat waves distort the horizon. Constant winds sap moisture from every pore. Tantalizing thunderstorms build but cheat the land of rain. The rock walls of an 800-year-old pueblo frame a landscape offering little obvious source of food, water, or comfort. On a summer day, the high desert of Wupatki seems much the same today as when, amid the rumblings of Sunset Crater Volcano, Ancestral Puebloan people settled here. In this region of dramatic geologic landforms, climatic extremes, scarce water, and diverse plant and animal species, they created self-sustaining lives. Wupatki National Monument was established to preserve the archeological sites from which we can learn about past and present cultures.

Archeologists, geologists, meteorologists, and other scientists classify the environment around Wupatki as "arid" because it receives less than 8 inches of precipitation a year. Because of the arid environment water was a precious resource, especially during the spring and fall dry seasons. The Ancestral Puebloan people modified their landscape just as people modify their landscapes today. In fact, the environment around Wupatki today was partially shaped by these ancient people 800 years ago. The people who inhabited Wupatki grew most of what they ate, and in turn they changed the composition of the soil. Gathering wood for fires and construction has changed the woodlands for miles around.

To conserve the little rainwater that fell, the Ancestral Puebloans built terraces and small rock check dams. Following the Sunset Crater volcanic eruption, farming in Flagstaff became less of a challenge for the Ancestral Puebloans people, because they discovered that the small layers of cinder and ash blanketing the northeastern lands helped keep the soil moist. As a result, a new agricultural community spread in the northeastern part of the region, where the people built larger multi-level pueblos--instead of smaller scattered pithouses as had been their tradition before the volcanic eruption.



^{*} Information contained here is a compilation of information taken from Western National Parks Association Publications, the National Park Service webpages associated with each park, and information written and compiled by Brian Crosby during an internship with the NPS. For more information please visit www.nps.gov or a national monument.



Sunset Crater Volcano

Over 900 years ago, the eruption of Sunset Crater Volcano in Arizona forced the people living in the region of present day Flagstaff to evacuate their homes and the lands they had cultivated for 400 years. There must have been enough warning for the inhabitants to move out of harm's way; no evidence has been found that people died as a direct result of the eruption. However, pithouses for miles around were burned and filled with cinders, and others undoubtedly remain buried beneath layers of lava. The eruption not only destroyed homes, but it also changed the land, making it difficult for the Sunset Crater community to grow crops. People relocated, some to nearby Walnut Canyon and others to Wupatki, where they found that thinner layers of ash and cinders actually benefited crops by holding moisture in the soil. Agriculture and

trade flourished for about 100 years before people once again moved on. Their descendants, including the Hopi and Zuni, still live nearby; memories of the eruption live on in their stories and traditions.

Before this volcano erupted, there was fertile soil here. The fields that were here are buried now beneath hundreds of feet of cinders, and the landscape has changed forever. New soil is forming, but it's a slow and precarious process. Weathered particles and bits of organic matter must accumulate between the cinders in order for most plant species to germinate, survive, and reproduce successfully.

In the early stages of soil formation, this process is easily disrupted. Any disturbance can dislodge the particles and cause them to sift deeper into the cinders, where they may be out of reach for use by plants; plants already established may also be dislodged.



^{*} Information contained here is a compilation of information taken from Western National Parks Association Publications, the National Park Service webpages associated with each park, and information written and compiled by Brian Crosby during an internship with the NPS. For more information please visit www.nps.gov or a national monument.