

Mesa Prieta Petroglyph Project

Docent Resources

THE FLUTES AT MESA PRIETA: or WHAT DOES A ROCK MUSICIAN PLAY?

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Anyone who walks the trails at the Wells Petroglyph Preserve on Mesa Prieta can spot numerous flute players pictured on the rocks. Our best estimate is that the Preserve has around 150 flute player petroglyphs. These “rock musicians” are not all depicted in the same way, however. Some are humpbacked, others bug-like with segmented bodies, feathers, or antennae. Several appear to be seated, while others lie down, walk or dance. Quite a few appear to have obvious amorous intentions. A unique aspect of the petroglyphs at the Mesa Prieta Preserve is that many of the flute players depicted here resemble four-legged animals rather than the typical anthropomorphous biped figures. The presence of so many flute players at the Preserve presents us with a number of questions: Why were so many flute player images carved into the rocks at this place? How did the Ancestral Puebloan people understand these images? Why were the flute players concentrated in certain areas within the Preserve? Why were many of these Mesa Prieta musicians depicted as zoomorphic flute players? Answers to such questions continue to elude us, and the unknowns give the place a sense of mystery.

Another question about the flute player petroglyphs has to do with the instruments in their hands (or claws or paws!). What kind of flutes would those lively musicians be playing? Both archaeology and ethnographic accounts of tribal traditions help us with the answer to that.

“Ancestral Puebloan Flutes” and “Native American Flutes”

The first thing to say about the flutes we see in the petroglyphs is that they were quite different from the popular “Native American Flutes” we often hear today. The typical flutes played by contemporary Native and non-Native musicians, such as R. Carlos Nakai, Robert Mirabal, Joseph FireCrow, Mary Youngblood, Robert Tree Cody, Tony Duncan, and Jeff Ball, are indigenous instruments, to be sure. They are, however, a completely different kind of instrument from the ones used by Ancestral Puebloan people. The popular “Native American Flute” of today has different cultural origins in North America. Its origins and social uses are rooted in Plains Indian traditions rather than Pueblo traditions. For that reason, the “Native American Flute” is also known, perhaps more properly, as the “Plains Flute,” “Courting Flute,” or “Love Flute.” For many Plains tribes it was a flute that a young man used to woo his beloved.

Because of its construction, the appearance of the “Plains Flute” is very different from that of the “Ancestral Puebloan Flute” depicted in petroglyphs. Though both types of flutes are played vertically (unlike the flutes in an orchestra), the “Plains Flute” is a two-chambered duct flute that requires the use of an externally attached sound mechanism, called a “fetish,” “block,” or “saddle.” This feature gives the visual profile of the “Plains Flute” a distinctive bump on the top of the flute near the mouth end, just above the finger holes. No flutes depicted in the Mesa Prieta petroglyphs have that distinctive detail, and the reason is clear. As we will see, the flutes of the Ancestral Pueblos and other ancient

Southwestern people were simple slender tubes that were end blown in a unique way. They were played like the Japanese *shakuhachi* flute and the South American *quena*. The ancient flutes of the Southwest predated by centuries the earliest versions of the so-called “Native American Flute.”

The Flutes of the Petroglyphs – Reed, Wood, and Bone

Archaeologists have documented and dated several types of ancient Southwestern wind instruments, including flutes, whistles, and birdcalls. These were made variously from reed (cane), wood, bone, or yucca stalks.

Ancient Reed or Cane Flutes

Among the earliest flutes archaeologists have discovered in the American Southwest are flutes made from reed or cane. These include:

Tularosa Cave Flutes – Four reed flutes and fragments discovered in three separate excavation strata of this Mogollon site. Dates range from 300±200 BCE to 700 CE. [Martin] Longest complete flute was 22.7”.

Obelisk Cave Flutes – A reed flute and a fragment excavated in Northeastern Arizona’s Prayer Rock District. Dendrochronology indicates a date range of 470 CE to 489 CE, or early Basketmaker period. [Bernheimer]

Gypsum Cave Flutes – Two reed flutes excavated in Nevada. Likely late Basketmaker, 500-750 CE. [Harrington] They measure 23 ¾” and 10 ¼”

Grand Gulch Flute – Found in San Juan County, Utah, this reed flute is from 750-900 CE, Pueblo I [McLoyd, Graham]. On display at the National Museum of the American Indian, NYC. 13” in length.

Mummy Cave Flutes – Earl Morris excavated 5 reed flutes from Mummy Cave in Canyon de Chelly. One was coated with pitch and encrusted with white beads. These date to 1253–1284 CE, Pueblo III

Hawikku Flutes – Hawikku was begun in 1400 and was destroyed by Coronado in 1540, Pueblo IV. Hodge excavated the ruin site 1917-23, and without further detail, he mentions “large flutes of reeds” among the objects he excavated.

Archaeologists have discovered only a few ancient reed flutes, and some of those are only fragments. It seems likely that reed flutes were much more common than the low numbers would suggest, but over time they were lost to decay. It is clear, though, that making reed flutes is a practice that has continued in the Pueblo World. Anthropologist Barton Wright provides us insight into this Pueblo tradition, writing in 1979 that the modern-day Hopi were using three types of reed or cane in making ceremonial flutes. He also pointed out that the word for flute in Hopi, *Pá:kav’lena*, translates literally as “reed flute.”

Ancient reed and cane flutes were long and slender instruments, just as those the Mesa Prieta flute players are holding. The unbroken reed flutes that have been recovered range from 9” to 23 ¾” in length. The number of finger holes (stops) for these flutes varies from 2 to 6. The modern Hopi reed flute has 5 holes. Given the number of holes observed in these flutes, and the wide spacing of these along the length of the flutes, the musician must use two hands to play his flute. The musicians of the

petroglyphs, then, playing with both hands, tell us that their old instruments likely had four or more finger holes.

A feature of Hopi and Zuni flutes worth noting is the inclusion of a decorated “gourd bell” at the distal end of the flute. Cushing observed reed flutes at Zuni “trimmed with a bell-shaped gourd” at the end. This modern-day, and likely ancient Pueblo practice of adding a symbolic gourd attachment to flutes may offer an explanation for why certain of the flutes at Mesa Prieta appear to have a flared or otherwise expanded end. The petroglyphs may reveal an ancient Pueblo practice that continues today.

Ancient Wood Flutes

The Mesa Prieta flute players may have been holding reed flutes, but wooden flutes are also a possibility. Ancient wood flutes were somewhat more durable than those made of reed or cane, but for similar reasons, not many of the early wood flutes have survived. These are some notable examples:

Broken Cave Flutes -- The oldest wooden flutes discovered in the American Southwest were found at Atahonez Canyon in Prayer Rock District, Arizona, at a Basketmaker III site known as “Owl’s Head” or “Broken Flute Cave.” They date from 620–670 CE [Morris, Bakkegard]. Archaeologists discovered four complete wooden flutes at the site – two were found intact and two others were found broken, but were later repaired. Each flute was made of boxelder wood (*Acer negundo*) and had 6 finger holes spaced widely, 3 and 3. The four wooden flutes shared a common tuning. The two intact flutes were found tied together, and each was decorated close to the mouth with black, blue, and red bird feathers. The four Broken Cave flutes range from 29” to just under 27”.

Chaco Canyon – Pueblo Bonito -- Room 33 Flutes – The date of these flutes is 900–1150 CE, Pueblo II period [Pepper, Douglass]. Among many ceremonial items, George Pepper discovered 8 flutes and flute fragments in Room 33 of the well-known Pueblo Bonito structure. Lengths of the 4 complete flutes were 27.2”, 27.3”, 20.3”, and 42.5”. Each flute had 4 holes. Two of the flutes were made of cottonwood. One complete flute was painted black, orange, and green, with a pattern of circles, cloud patterns, and bands. The distal ends of two fragments featured relief carvings of a bear and a mountain lion. A broken but near complete flute was more than 3½ feet in length. These wood flutes are thought to have been associated with a flute fraternity similar to that of the Hopi.

Betatakin Flute – A fragment of a wooden flute was found at this site near Kayenta, AZ. It was dated to 1246–1286 CE, Pueblo III period [Fewkes, Robinson]. The flute was decorated with incised rings.

Mesa Verde – Spring House Flute – A fragment of a wooden flute had 3 holes and another fragment had a possible 4th hole. Dated to 1266–1277 CE. Pueblo III period [Nordenskiöld, Robinson].

Otowi Flutes – Fragments of two wooden flutes were excavated by Lucy L.W. Wilson at the Otowi site. They date from approximately 1400 CE, Pueblo IV period.

The archaeological evidence makes it clear that wood flutes are present in the Pueblo World from the Basketmaker III period up to the Pueblo IV period. And the wood flute tradition is present among the Eastern Pueblos as well as the Western Pueblos. The Otowi site is less than 30 miles from the petroglyphs on Mesa Prieta, most of which are from the Pueblo IV period. The people of San Ildefonso Pueblo today think of Otowi as their ancestral place. If the flute players at Mesa Prieta were playing

wood flutes, it would have been a familiar kind of instrument.

Ancient Bone Flutes

In the early Southwest, bone flutes were rare. By the Pueblo IV period, however, flutes made of bone were a common trait. They commonly are found with associated ceremonial goods. These flutes were made from various bird bones – eagle and hawk being most common, but also turkey, swan, and sandhill crane bones. Older bone flutes are most often found with both ends cut flat, in contrast with the more recent flutes that often may have articular ends.

At the Otowi site, where Lucy Wilson found wood flute fragments, she also discovered 18 bone flutes and whistles. Other sites with bone flutes include:

Poshuouinge Flutes – Thought by many Tewa to be a prominent ancestral Middle Place Pueblo, Poshuouinge Pueblo (1350 – 1500) was excavated in the 1920s by Jeançon. He discovered 6 bone flutes: three had three finger holes, two had four holes, and one had five. The longest bone flute was 6 2/3”.

Sapawe Flutes – Located on the west side of Mesa Prieta, above El Rito in the Chama Valley, this Pueblo IV site (1350-1550 CE) had 9 bone flutes [Maxwell]. Like Otowi the Tewa regard this place as an ancestral site.

Paa-ko Flutes – 10 bone flutes were recovered from Paa-ko Pueblo, a place considered ancestral by Santo Domingo, Hopi-Tewa, and the Tano. It was in use from 1200-1400 CE, Pueblo IV period, and again later until being left unoccupied after 1600.

Pecos (Cicuique) Flutes – Regarded as an ancestral place by the Towa, Pecos is located 18 miles SE of Santa Fe. When a Spanish delegation sent by Coronado first visited the Pueblo, the chronicler reported they were greeted with flute music. Excavation at the site discovered more than 20 bone flutes in one room.

A complete list of ancient bone flutes from Southwestern archaeological sites would be lengthy. These make it clear that bone flutes were a part of numerous Pueblo communities, before and after the Mesa Prieta petroglyphs were being made. According to Emily Brown who studied a sample of 147 of these bone flutes, the average length was 6-7 “, with the very longest bone flutes being only around 9½”. The great majority of these bone flutes had three holes, resulting in instruments that would typically play four notes.

Something interesting to note is that, because of the wide variation in the spacing between the finger holes in bone flutes, there would be considerable variation in the pitches they produced. This is in apparent contrast with wooden flutes. Those who have analyzed the structure of ancient wooden flutes have observed that, over time, the instruments have had something of a standard template for construction. Wooden flutes from the Broken Flute Cave and those from Pueblo Bonito, though separated by five hundred years, share somewhat common dimensions and hole spacing. This suggests that bone flutes, with their limited range and random tones, may have had different social uses than the more musical, standardized, and visible wooden flutes.

So What Are Those Flute Players Playing?

Of course, we can't be certain, but as we look at the flute players on the rocks, we know that they would be playing one of the three kinds of flutes that were traditional to the Ancestral Puebloan artists – a reed flute, a wooden flute, or a bone flute. Of the three flutes, the bone flute seems the least likely to be the right instrument, despite how common they appear to be in the Pueblo IV period. (Do they seem so common because bone does not disintegrate as easily as reed or wood?) Bone flutes are short instruments, and that is not the impression we get from seeing the flutes in the petroglyphs. And the earliest flute player images pre-date considerably the Pueblo IV period when bone flutes became common. Beyond this, a bone flute that typically has only three holes does not require the musician to use both hands to play it. Though there is an occasional “rock musician” playing on the hill with one hand, the pecked-out silhouette of the flute player almost always shows him making music with two hands on the flute. All things considered, it seems likely that the flute players are playing either a reed flute or a wooden flute.

And Why Are They All Holding Their Flutes That Way?

The flutes of the Ancestral Puebloans were difficult instruments to play. Musicians today who have made accurate reproductions of ancient wood and reed flutes attest to that. The flute itself is just a hollow tube with holes drilled into it. If a musician blows through it as if it were a recorder or a “Plains Flute,” the instrument does not produce a musical tone. The Ancestral Puebloan flute did not work like those instruments. It is a distinctly different type of instrument, one known as an “edgeblown” or “rimblown” flute. The flute player petroglyphs offer a valuable picture of how the Ancestral Puebloans played their instruments. Looking at those petroglyphs, we observe that nearly every flute player is holding out the instrument at something like a 45 degree angle. By doing that a player can blow a controlled stream of air across the opposite edge of the mouth of the flute and make it sing. That 45 degree angle gives musical potential to the hollow tube. When the player's wind stream is split on the edge of the flute's mouth, it creates a vibration that runs down the inside of the flute, and the result – with control and practice -- is music. By opening or closing the finger holes, the musician changes the pitch of the notes the flute delivers. The point of this is to explain why the flute player is striking that distinctive pose. He is making his edgeblown flute work.

