



SITE LINES

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Co-Chair Message

The council met on December 8 at the SFNF office. Here are some highlights:

The 2018 annual meeting was deemed a success, especially the presentations by Tom Swetnam and Ana Steffen on “Fire and Humans in the Jemez Mountains” and “Fire effects on Material Culture in the Jemez Mountains,” respectively. They demonstrated that we really can have a successful PowerPoint presentation outside, in the mountains, at a campground, during the day. And weren’t those tree-ring and blown-up obsidian samples cool?

Budget Coordinator Courtney Perkins reported that overall, our expenses and income balance is doing fairly well. Courtney is working on a proposed budget for next year, anticipating whether we should hold a formal training session; there are nine or ten interim site stewards so far who will need formal training. All training materials will be posted on our website. A proposed budget will be presented at the next council meeting.

The site steward and Forest Service personnel roster that is available to council members is updated twice a year by Ann White. She requests that any changes in addresses and phone numbers be sent to her; stewards can report changes to their ATL who will send them to Ann.

The proposed date for the 2019 annual meeting is September 21-22. The meeting will be at an indoor location next year. Will Dearholt agreed to chair the annual meeting

committee. Irene Wanner and Nancy Cella volunteered to be on the committee. To reduce the usual catered lunch expense, it was suggested that we find a place where we can have a potluck lunch and not be too expensive to rent. Will and Mike will explore options for an indoor venue. Stewards who wish to suggest a meeting site and/or help with the meeting planning are encouraged to contact Will at wrd@lanl.gov.

A nominating committee was formed; K. Paul Jones volunteered to chair the committee and Heidi Strickfaden agreed to serve as a committee member. Open positions on the council include two members-at-large, the budget coordinator, and secretary. If you are interested in applying for any of these positions, please contact K. Paul at kenneth-pauljones@g.com. Members-at-large serve as contacts between the council and all site stewards. Serving on the council is a great opportunity to become more acquainted with others and site steward business. All council members must be certified.

Mike and the council approved the assignments of co-ATLs of the Jemez team—Chris Gardner and Ann White—and Elaine Gorham as ATL for the Gallina team. Subsequent to the meeting, Elaine Gorham emailed Gallina team members that Becky Johnston agreed to be the new Gallina AATL. Congratulations and thanks to all!

ATL reports on team activity had much the same theme: roads are closed or snow-packed or muddy. For site stewards perks, there was a

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The Editors
Thank You!

Co-Chair Message (cont)

proposal for ATLs to offer guided trips to their favorite site over the next two years, so be on the lookout for those announcements.

The next council meeting will be on February 16, 2019 at 10 a.m. All are welcome to attend.

-Lois Haggard and Paul Leo

Gallina, Caja del Rio Teams Add New Stewards

Two teams, Gallina and Caja del Rio, have added new stewards who have received individual interim training from their Area Team Leaders.

Gallina Area New Stewards

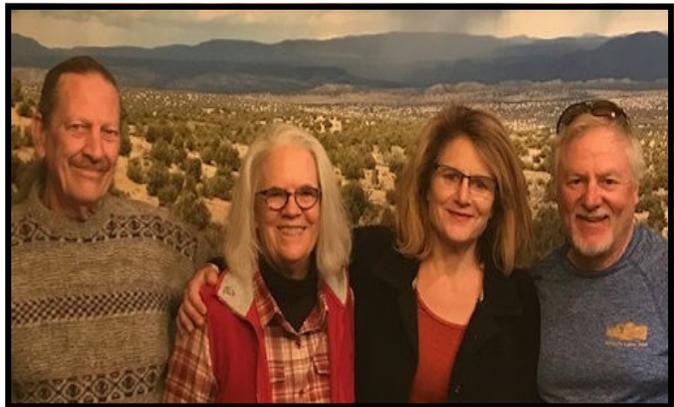
Co-ATLs Jo Douglas and Elaine Gorham welcomed four new site stewards to the Gallina area team. Joining the group are Rick Blanchard, Katy Blanchard, Carolyn Calfee, and Tom Calfee.

Katy writes: *Born and raised in North Carolina. After a year in Italy, moved to NYC where I worked at NYU for two years before moving to San Diego where I started my graphic design business, which I had for 20 years. Moved to NM 18 years ago and for a good part of those years, I had a medicinal herbal tea and body-care product business. Passions have included music (majored in music the first time I went to college), jewelry making, and knitwear design. One of the things at the top of my bucket list is to work/volunteer on an archaeological dig.*

Rick says that he's: *A fourth generation native of Southern California, and lived there off and on until we moved to New Mexico in 2000. I am an active landscape architect/irrigation designer with all of my projects in the Los Angeles area. I also am a painter and photographer, and am interested in the remote places in New Mexico and the cultures that existed there. Preservation of the past is important to me, and I recognize the need for protecting sites from harm.*

Carolyn Calfee is the owner of Abiquiu Vacation Homes on Abiquiu Lake. She has a deep appreciation for the culture and history of this region, and enjoys hiking, skiing, scuba diving, and most outdoor adventures.

And Tom Calfee is a financial advisor for Merrill Lynch. "I love to hike, wood work, rock work, and do water sports. I also love fine wine and single malt Scotch."



Left to right: Rick, Katy, Carolyn and Tom.

Photo by Jo Douglas

Caja Area New Stewards

ATL Gary Newgent announced that two new stewards have joined his team.

Dr. Jennifer Steketee has lived in New Mexico for more than 20 years, nearly all of it living adjacent to the Caja del Rio. She is the executive director of the Santa Fe Animal Shelter and a veterinarian. Interests include traveling, all things outdoor, and wildlife. She spends nearly every day running or hiking on the Caja del Rio and is excited to be part of the conservation of this historical area.

James Ackard is currently a buyer for Whole Foods. His former profession as a chef led him to live many places, including Mexico City, where he developed an interest in Pre-Columbian anthropology and archaeology. He has lived in New Mexico for 10 years and Santa Fe for 4 of them. Other interests include skiing, cycling, and exploring the culinary scene in Santa Fe.

Welcome, new stewards!

Site Steward Foundation Update

The Site Steward Foundation operated information tables at the Jemez Historic Site on Archaeology Day, October 6, and at the Coronado Historic Site at the Fiesta of Cultures, October 20.

Ten site stewards attended the southeast Utah tour October 25-27 for three days of day hikes to archaeological sites in San Juan County led by tour guide, Gary Newgent. The tour included visits to the newly opened Bears Ears Educational Center in Bluff and the Edge of the Cedars Museum in Blanding with a back-room tour of artifacts and perishables not on display to the public by Jonathan Till, the museum curator.



SE Utah tour group.

Photo by Gary Newgent

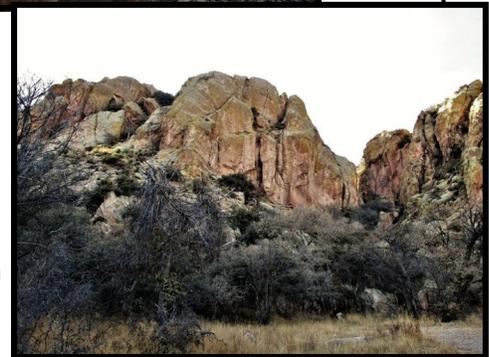
The foundation also held a two-day tour of sites in the Mimbres Valley and near Silver City during the Thanksgiving weekend, November 22-24. The tour included a group buffet dinner in Silver City on Thanksgiving evening and a visit to the Silver City Museum.



Above: Rock art in the Mimbres Valley

Right: Petroglyph site along the Gila River

Photos by Bill Hudson



On the way to the Procession rock art panel.

Photo by Paula Lozar

The foundation recently awarded the 2018 grant of \$1,000 to the South Park Site Steward Program in Fairplay, Colorado, to help pay for its newly formed 501(c)(3) nonprofit organization's first year's directors and officers liability insurance premium until the group obtains its permanent funding next year from other sources. Since the South Park Site Steward Program has now formed its own nonprofit friends group, the foundation will no longer act as its friends group.

The Archaeological Society of New Mexico (ASNM) has not yet posted the 2019 annual meeting information and registration on its website, but the 2019 annual meeting will be held in Silver City, hosted by the Grant County Archaeological Society; there is some preliminary information on the website <https://www.gcasnm.org>, and more information and registration will be posted on the ASNM website <https://newmexico-archaeology.org> in January.

Foundation Update (cont)

If you are not a member of the Site Steward Foundation, or have not renewed your membership for 2019, please consider joining or renewing today. The foundation accepts debit and credit cards for membership dues and donations on our website www.sitestewardfoundation.org.

If you would like to be notified of foundation tours and activities, please subscribe to the email list on the foundation website.

-Gary Newgent
President

Stone Calendars of the Southwest

Ron Barber, retired from LANL, presented a comprehensive and detailed review of the stone calendars in the Southwest that he and his team have surveyed and recorded for a number of years. The October 3 lecture was the second in our Wednesday evening series of winter programs, held in the conference room of the Santa Fe National Forest Santa Fe offices.

Once again, those attending received the full impact of marvelous slides and excellent commentary that described these unique petroglyphs in the Southwest as well as several other regions of the country. In general, these images interact with light and shadows of the sun and full moon. Most of us have heard and seen images that demonstrate the summer and winter solstices, as well as the spring and fall equinoxes. The Sun Dagger at Chaco Canyon has been widely publicized, and there are examples of these phenomena built in certain rooms of pueblos, e.g., at Salmon Ruin. Surprising, to me anyway, is that less than five percent of petroglyphs are associated with these particular celestial events.

Many images are examples of how indigenous cultures used the sun's positions to develop calendars. Every day the sun's progress through the sky takes a 180° different path, with standstills at a solstice and equinox. The sun's cycle takes 365½ days, and the lunar cycle is 18 ½ years (remember Stonehenge). Shadows on rocks move one-half inch per day.

Recording rock art is a widespread activity. Among those mentioned by Mr. Barber were the Columbia River Gorge, the Galisteo Basin, and Casas Grandes. His team of associ-

ates—the Petroglyph Posse—has hiked, kayaked, and rafted to survey for rock art. They have used time-lapse photography, made simulations, sketched, and measured. Waiting for the exact moment for the sun's movement was sometimes tedious, he said.

All cultures have recorded their presence in rock art: pictographs and petroglyphs. The group has recorded rock art as early as 3000-5000 BC to the newest, Pueblo IV. The team has explored cultures of Fremont, Patayan, Hopi, Hohokam, and have queried Hopi elders.

Dating images to the Archaic, the team relies on degree of patination, style, and chemical deposition to obtain an approximate range of dates. If rock art is associated with a site, C-14 and tree-ring dates may be available. Examples of images include spirals, starbursts, and wheel spokes. Wedges of light on a spiral, for instance, can specify certain times of day as light moves across the spiral; time can be calibrated at any time of the year. Petroglyphs are usually found on south-facing surfaces, with not many on the north-facing surfaces.

Ethnographic reports from the turn of the 20th century, which represent greatly diminished populations, were consulted. Zuni Pueblo lost about 90 percent of its prehistoric population since European contact. *My Adventures in Zuni* by Frank Cushing was among the reports that discussed the activities of their Sun Priest. Each pueblo had a designated sun watcher, whose task was to observe the sun's movements throughout the year. Some used a notched calendar stick to schedule ceremonies, field preparations, and planting times. Sun and moon cycles became an observatory, often within the pueblo itself: sunlight enters through specific window or a port in a house wall. Hopi sun watchers used holes in the clan house.

Stone Calendars of the Southwest (cont)

The team labeled round petroglyphs (Big Round Things) in great variety—pecked and painted. Because of the elliptical orbit of the Earth, changes in the equinoxes and solstices were noted. For instance, the Shalako ceremony at Zuni does not occur at the same time each year.

Many petroglyphs predate the Katchina Cult (AD1200) and the great migrations of the 1200s. Is the serpent image Tewa in origin? Can their migrations be recorded by dating the serpent image in different locales?

Mr. Barber commented that the Petroglyph

Posse had “lots of fun.” They needed to be in place when the sun arrived at a certain place, either rising or setting. Glyphs are often close to habitation sites, maybe a mile or so and on a clear horizon.

Mr. Barber concluded by showing what he called “an entertainment video,” which it certainly was. His whole program, which was clearly assembled for a variety of audiences, was one of the best I’ve heard. Many thanks go to Gail Bryant for scheduling this speaker.

— Nancy Cella

Archaeology of Pecos – Myth, Mystery, and Cultural Continuity

Presented by Jeremy Moss, Archaeologist

Chief of Resource Stewardship and Science with the Pecos National Historical Park

Called Cicuye—or “a place where there is water”—Pecos is one of two Towa-speaking pueblos in northern New Mexico (Jemez is the second). The area has received human usage for thousands of years. Archaic presence has been documented at 6000 BCE but no Paleo evidence has been identified. Three pit houses dating to 800 CE were excavated and found to be more than three meters deep.

Pecos was one of several dozen small rock and mud villages built in the upper Pecos Valley around Glorieta Creek about 1200 CE. During the next hundreds of years, the population increased as well as the number of sites, mostly field houses, all noted to have a lack of defensive structures. By 1400 CE, the aggregation of larger communities reflected concern of a defensive response to the raiding Plains Indians, notably the Comanches.

By 1450 CE, the village had grown to house more than 2,000 people in its five-story complex. The main pueblo was built in a rectangular shape on a mesita actually on top of earlier sites and had a defensive wall with only two access points around the entire pueblo. Kivas were established dating 1450 to 1575 with the larger kivas being built in later times.

Trade with the Plains Indians was a major source of commerce for the Pecos people. The pueblo was a major trade community and controlled the Glorieta Pass between the high

mountain valleys and Rio Grande Valley and the plains to the east. The Plains Indians traded bison hides, slaves, and meat as well as chert from the limestone quarries known to them. In return, the Pecos people traded slaves (Indian), agricultural produce, and pottery. And, of course, intermarriage would have occurred.

Francisco Vásquez de Coronado arrived in the area in 1540-1541 searching for the Seven Cities of Cibola. He was accompanied by about 200 Spaniards and 500 to 700 Mexican troops as well as countless horses and other livestock. He was directed to continue on to the plains and provided with a guide, El Turko, to lead him there. After a period of time, the Spanish recognized the ruse as a ploy to remove the Spanish from Pecos; they killed the guide and returned to Mexico.

The Spanish returned to Pecos in 1598 where they established a permanent settlement.

Construction of the Spanish Mission from 1619 to 1625 may have represented a time of reconciliation between the Spanish and Native Americans. However, the Pecos people resented the Spanish priests interfering with their religious ceremonies and destroying many of their religious symbols.

During the Pueblo Revolt in 1680, the church was burned and destroyed and pueblo members built a large square kiva in front of the church for use by the pueblo. Following the reconquest, the church was rebuilt between 1717 to 1720; that

Archaeology of the Pecos (cont)

structure constitutes the mission remains of today as well as the kiva.

Following encounters with the Spanish, the population of Pecos experienced a steady decline related to acquired diseases including measles, smallpox, and influenza introduced by the Spanish. Horses obtained by the Plains Indians as well as Apaches and Navajos enabled those tribes to conduct successful raids. By 1838, only 18 to 21 survivors of the original Pecos tribe remained. They migrated to their fellow Towa village of Jemez where they were incorporated into the pueblo, bringing many cultural traditions that remain today.

The area became inhabited by Spanish and Mexican squatters who started small farms and ranches. In 1821, the Santa Fe Trail brought adventurers, trappers, traders, and gold rush seekers through the area. Many would have settled. The U.S. Army had a presence in 1846 prior to the Civil War. In 1879, the railroad brought more changes followed by building of Route 66, the first trans-continental highway.

Pecos Pueblo and an area of 341 acres were made a New Mexico State Monument in 1935. In 1965, it was made a national monument and it was turned over the National Park Service. In 1991, the park was expanded to more than 6,000 acres and became Pecos National Historic Park

Archaeological Research

Adolf Bandelier was recorded to have done survey work at the abandoned Pecos Pueblo where he measured the surviving ruins of buildings. He did little or no excavating and likely did not collect any human remains.

Alfred V. Kidder started his archaeological work at Pecos Pueblo site in 1915 and continued until 1929. He worked in the 20-foot-deep midden north of the pueblo grounds with 600 years of accumulated history. His development of stratification technology occurred during this time as well as the development of pottery chronology for glazed wares. He revealed sites

could be dated by ceramic types. Among his excavations were 2,000 burials, which were removed to the Robert S. Peabody Museum of Archaeology at Phillips Academy in Massachusetts. In Kidder's excavation, he notes covered walkways and subterranean connecting passageways and construction that does not allow access to the pueblo from the ground level. These details were all protective measures taken by the Pecos people. Early kivas revealed no evidence of weaving as early as 1400; however, in later times, weaving became a common activity.

This research laid the foundation for Kidder's modern archaeological field methods. His work resulted in the publication of *An Introduction to the Study of Southwestern Archaeology* published in 1924.

Subsequent archaeological research has continued since Kidder's extensive work. In 1969, Jean Pinkley discovered the earlier church remains and excavations from 1966-69 by Gunnison were based on the search for Plains and Apache Indian sites. Other excavations have revealed metal arrowheads from the Plains and a cellar or "furnace," a subterranean room with vitrified brick-lined walls likely related to Spanish industry. Research is ongoing under the jurisdiction of the National Park Service.

Cultural connections with NAGPRA resulted in the repatriation of the 2,000 burials removed by Kidder. In 1998 and 1999, Jemez pueblo leaders traveled to the Peabody Museum to successfully negotiate the release of the remains. A semi-truck, escorted by National Park Service rangers and leaders from the Pueblo of Jemez, carrying the remains and hundreds of artifacts, made the 2,200-mile journey to New Mexico. Hundreds of tribal members from Jemez walked for three days crossing mesas, mountains, and the Rio Grande to the reburial site. On May 23, 1999, a private reburial was conducted at Pecos, what the Jemez people consider a sacred ancestral site.

— Candie Borduin

Gallina Pottery—Simple, but Well-Made....

Thanks to organizer Bob Florek of the Rio Chama team, members of the Gallina team received a great introduction to Gallina pottery on October 24 and October 27 in Santa Fe.

Never missing an opportunity to have a choice in restaurants, the Youngsville contingent, consisting of Jo and Ramey Douglas, Katy Blanchard, Melodie Usher, and Anne Beckett, started things off with a delicious lunch at The Ranch House on the 24th. Arriving at the Center for New Mexico Archaeology, they were given a guided tour of the facility by Dr. Eric Blinman, director of the Office of Archaeological Studies. Then they joined Bob, Elaine Gorham, Larry Singer, and some OAS folks in the ceramics lab for a wonderful presentation by Dean Wilson, ceramics expert extraordinaire. Side note: to ensure no collection items leave the ceramics lab, it was necessary to sign in and place purses, bags and coats in lockers just outside the entrance before entering.

The Gallina lived in small groups of pit or unit houses along what is today State Route 112 in the Jemez Mountains. Most sites are dated from the early 1100s to the late 1200s and are concentrated from Dulce to Gallina, N.M. Based upon the archaeological research, it appears that the Gallina held themselves separate from other groups in the greater Four Corners area, staying on the periphery of the influences of northern San Juan and Chacoan groups.

A couple of us had heard Lewis Borck speak about his research on the Gallina and he and Dean both believe that it is incorrect to refer to the Gallina as “Anasazi Hillbillies” just because they lived simply. They were highland farmers and seemed to value that which served their needs, without a drive to change things. Dean attributed the Gallina people with having found something that worked and sticking with it (early pottery that was produced late is how he described it). This is very evident in their pottery.

There are two types of Gallina pottery: Gallina Gray and Gallina Black and White. The Gallina Gray is generally simple utility ware, but very finely made. It is plain, has no slips, and is unpolished and undecorated pottery, made with sand temper. Maybe one percent included textured, corrugated, or neck banding. Gallina

Black and White included very simple lines, without borders, and painted with vegetable dyes rather than organic paint. Beeweed was a common source of paint. Jars were painted on the outside and bowls were painted on the inside.

A unique feature of Gallina pottery was the production of pointed bottom pots. The only other group in the Southwest to produce pointed bottom pots is the Navajo.

After the workshop, the group changed for a field trip to two Gallina sites with Larry unable to join and Rick Blanchard joining. The first was Dwight’s Site, named for a former site steward. We were able to see and identify many pieces of Gallina pottery, including the bottom of a pointed jar! Dwight’s Site is a small site of a few rooms, but an excellent location for viewing the surrounding area. In addition to a couple of petroglyphs, you can see holes in the sandstone where vigas would have held up the roofs. The group enjoyed a picnic lunch and speculated about the possibility of a cave in the distance.

Our second stop was the Clay Site, with its unbelievable exposed seam of clay. It was interesting to consider how often Gallina people visited this place to gather clay for their pottery. One of the most interesting features of the site is some deeply carved petroglyphs. There was much discussion about whether or not they were ancient as is, ancient with some additional carving added, or modern. Those most familiar with petroglyphs in the area felt they were definitely ancient.



Exposed clay seam at the site. (note: the photo has been cropped to better illustrate the clay seam—to left of crew)
Photo by Jo Douglas

Gallina Pottery (cont)

As you probably know, no current Native American group claims the Gallina as ancestors. Dead shared that he thinks there might be a connection to the people of Jemez Pueblo, who were living in the mountains when the Spanish arrived and not where they live today. Where these people came

from, why they chose to isolate themselves, and what happened to them is what keeps the Gallina team committed to helping to protect the many and varied Gallina sites.

-Anne Beckett

Oaxaca, October 26-November 5, 2018

Our ten-day expedition to southwestern Mexico with The Archaeological Conservancy (based in Albuquerque) began with a long day of air travel (ABQ-LAX-Mexico City-OAX). We were met at the Oaxaca airport just before midnight, a small facility so there was no wait for baggage, then we went by vans to town, a 20-minute ride. The Hotel Gala de Oaxaca, billed as charming, meant very small rooms and no elevators. But they were clean, comfortable, the staff was always friendly, and best of all, we were less than a block from the *zócalo* (city center).

We arrived a day early and spent our first morning after breakfast, which doesn't start before about 8 a.m. unless you choose a street stand, enjoying music and dances, parades, a folk art *feria* (fair), and decorations of skeletons and flowers everywhere. It was good to have a day to explore. The weather was sunny and mild all but one afternoon. We visited lots of street vendor booths, the 20 November *mercado*, several churches and cathedrals, and when we grew tired and hungry, relaxed with cold beers that were served with hot salted peanuts and roasted garlic accompanied by a whole lime cut in quarters. Downtown is clean, its buildings brightly painted, and the general atmosphere welcoming.

Our second evening, we met the group for orientation and hors d'oeuvres. The next morning, after a generous buffet breakfast with juice, coffee, yogurt and fresh fruit as well as half a dozen main courses and breads, we walked less than a mile to the *Mercado de Abastos*, the huge main city market with flowers, meat and fish, breads, hideous rubber Halloween masks, yucca baskets, embroidered blouses, cheeses, pottery, you name it. We sampled chocolate, cheese, and fresh bread, which was decorated with small heads (plastic inserts) meant to

honor dead relatives. That afternoon, we visited the regional museum that featured artifacts from the ancient sites of Mitla and Monte Albán, including famous gold jewelry from Tomb 7 said to rival the King Tut grave goods.

Monte Albán overview



The next day, our bus took us to Monte Albán west of the city. On a ridge top, its view spanned the horizon in every direction. Buildings and stairways framed a huge plaza and although there were a lot of people there, including school kids, it didn't feel crowded. The site dates from 500 BCE to 1521 (Spanish arrival). Stone stelai showed people and animals as well as sacrifices. Some of the group joined a walking tour of Oaxaca that afternoon.



Replicas of stone stelai at Monte Alban

Oaxaca (cont)

The next day, we visited several craft villages, then enjoyed a long day after that to the ancient sites of Dainzú, a Zapotec city founded in 350 BCE; the small palace and its exquisite sculptures at Lambityeco, which was an important trader in salt in ancient times; the marvelous geometric stone decorations on buildings at Mitla; and last, Yagul, with its delightful palace maze. These sites had ball courts, whose ceremonial importance is still not fully understood.



Sculptures at Lambityeco

On the way home, we made a short stop at a women's weaving co-op where much of the work was done on backstrap looms. Back in town, we found the staff at the hotel had erected a festive Day of the Dead altar in the lobby complete with foods, bright orange marigolds, and sugar figurines of all of us with our names attached.



Our Day of the Dead altar

Next, we explored Atzompa, a satellite city north of Monte Albán, founded about 630 BCE,

abandoned roughly 300 years later, and famous from ancient times to the present for its pottery. Excavations are ongoing. Its small museum was a treasure, highlighting many ceramic figures and huge hand-built storage vases from the site. That night, we took our flashlights plus candy and loose change as treats for children, and went to Day of the Dead festivities at the Xoxocatlán cemetery. One of our local guides told me that the Day of the Dead is the year's biggest holiday and reminds her of our Thanksgiving, when families come together to celebrate.

Our official tour scholar was Dr. Jeffrey Blomster, an anthropologist/archaeologist from George Washington University. In addition to his information, we were treated to several delightful presentations in Spanish of Oaxacan folk art including a cochineal facility that produces red dye, Arrazola's *alebrijas* (painted wooden animalitos), the famous black pottery of San Bartolo Coyotepec, paper making at Taller Arte Papel Vista Hermosa, and the beautiful weaving in the village of Teotitlán del Valle, where we had a demonstration of spinning, dyeing with natural pigments such as indigo, and weaving as well as a wonderful lunch of soup, tamales baked in corn leaves, mezcal and beer, and home-made ice cream. Chris and I spent our free morning on a guided ethnobotanical garden tour that boasted roughly 1,300 different kinds of plants, then later met the group to visit the Rufino Tamayo Museum of Pre-Hispanic Art. Much of the collection is of clay made in molds, and while beautiful, its authenticity is uncertain. We also stopped at Zaachila, the last capital of the Zapotec kingdom, as well as San José Mogote, important because it is one of few surviving early sites, founded about 1400 BCE.

The trip's balance of archaeology and contemporary crafts was wonderful, and our guides made sure everyone was comfortable and well fed. Most evenings, we met for happy hour when we could share photos and stories from each day's adventures. Although it was a large group of almost 30, we all shared common interests.

— Irene Wanner
—All photos by Chris Gardner

Recording Dendroglyphs on the Valles Caldera National Preserve

Some of us find our interest in site stewarding leads to related activities. Several stewards, including me, record rock art. And for several years I have volunteered with the Aspen Dendroglyph Project of the Valles Caldera National Preserve recording dendroglyphs, or aspen tree carvings, made primarily by shepherders.

Since aspen trees don't live much more than 100 years, the oldest recorded carvings by shepherders in the preserve are from the late 19th century. But it's likely that the tradition dates from earlier Spanish Colonial and Mexican periods in New Mexico.

Shepherders were latecomers to the caldera, however. For thousands of years, Native Americans from the late PaleoIndian Period to contemporary Jemez and other pueblo groups have relied on natural resources such as plants, animals, and stone tools made from obsidian resulting from the volcanic origin of the caldera. They were here only in the warm months since the high elevation is too cold for agriculture and year-round habitation.

With the arrival of Europeans, the lush caldera was common grazing land and freely used by Hispanic settlers for a century or more before it became a Spanish land grant to Luis Maria Cabeza de Baca and his many heirs. The grant was known as Baca Location No. 1 since 1860. Later, it was sold by the Baca heirs to ranchers and remained privately owned until it was purchased by the U.S. government from the Pat Dunigan family in 2000 as a preserve of nearly 90,000 acres, now managed by the National Park Service.

The Baca Location No. 1 land grant consisted of five *valles* or valleys. According to Craig Martin of Los Alamos, author of *Valle Grande - A History of the Baca Location No. 1*, the Baca family probably concentrated its herding activity not on the Valle Grande but on the smaller Valle Toledo, Valle San Antonio, and Valle de los Posos on the north side of the caldera. .

"Dates carved on aspen trees still testify to the use of these back valleys as sheep camps before the beginning of the 20th century. Utilizing the tall grasses of the valleys, the herders ran small flocks, probably no larger than several

hundred animals apiece," Martin writes. Martin is a volunteer with the Dendroglyph Project and has been a valuable contributor by surveying and recording the caldera's resources since before it became a national preserve.



Partial name or town MALLO at top, the letters D or OE and partial date 26/38 at center, and cross in the style or either a Pommee or Pattee Christian Cross

The Mariano Otero and Frank Bond families, grant owner-ranchers (*ricos* or *patróns*) of the late 19th and early 20th centuries, employed shepherds or *pastores* from nearby villages to tend the rancher's sheep or the shepherd's own animals on a *partido* or tenant-herding basis. The rancher was compensated on the basis of the increase in the size of the herd, the income from sheared wool, and other considerations.

According to historian Dan Scurlock, by the summers of 1917 and 1918, the number of sheep on the Baca pastures was estimated by a former employee of the Otero family to have exceeded 100,000. Writing in a 1983 issue of *El Palacio*, Scurlock said individual herds ranged from 1,000 to 1,500 animals and that shepherds moved their camps about once a week. The shepherds spent their leisure hours braiding horsehair, making rawhide moccasins, and carving on aspen trees, Scurlock writes. "For evening recreation, guitars, harmonicas, and a deck of cards were a necessity."

Recording Dendroglyphs (cont.)

Aspen bark was favored for dendroglyphs because it is easy to carve. The light cream-colored surface contrasts vividly with the image after it turns dark with age. Shepherders typically left their names and dates in a flowing script, and names of their nearby villages. Also depicted are animals, religious symbols such as crosses, and people, some with a sexual connotation. A record of a herder's name, sometimes in different areas of the preserve on different dates, may be the only evidence of them in the preserve's history.

The Dendroglyph Project is under the direction of Dr. Ana Steffen. She is the Valles Caldera's Interdisciplinary Scientist/Communicator. The carvings are a "record of people who otherwise are not documented," Steffen told the *Santa Fe New Mexican's Bienvenidos* magazine. "With the dendroglyphs, they can tell their own story—where they're from, why they were there, what their names were."

Since the program began in 2008, volunteer teams led by Colleen Olinger of Los Alamos have located and recorded more than 1,300 aspen carvings in widespread areas of the preserve. Their goal is to find as many as possible before the carvings disappear from the ravages of time, damage by animals, past logging operations, and forest fires that have burned seven of the surveyed areas.

Teams of three to five people at a time systematically document every carving they find. This includes recording dimensions of the image, the diameter of the tree, the compass heading, and the distance from the image to ground. GPS coordinates are noted, photos taken, and a drawing of the dendroglyph is made because, like rock art, details of carvings don't always show in a photograph.



Yvonne Keller (foreground) and Kit Ruminer recording image in previous photo

In some cases, sections of the image have peeled off the tree but may be found lying on the ground nearby and can be carefully placed back on the tree to make sense of the image. If the tree is dead and down with a dendroglyph still on it, the recorder may have to lie down and look at the underside of the tree to see it.

Date at top
5/14/38,
the word or name
PESCAREIDA at
left, and
the individual's
home town of
BERNALILLO at
right.



Along with finding the carvings, interpretation can be the most challenging part of the process. Making out a name and date can be complicated by aging of the tree and cracks in the bark that obscure part of the carving. Some can be easily confused with natural aging of the tree or with the marks of animals chewing or scratching the bark. Several people exchanging ideas often can figure out a name, a date, or identify an object faster than one person alone. Or they can decide that it's not human-caused after all .

All three volunteer activities—site stewarding and recording of both rock art and aspen tree carvings—help to preserve evidence left by those who came before us. And recording dendroglyphs gives me the opportunity to appreciate first-hand the stunning beauty of the Valles Caldera back-country.

-Bill Cella
Text and photos

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Recording Dendroglyphs (cont)

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Save the Dates

Wednesday, February 6, 2019: Joseph Aguilar, talk title to be announced

Saturday, February 16, 2019: 10:00 a.m. Site Steward Council Meeting, Conference room, SFNF Office, Santa Fe; all stewards are welcome.

Wednesday, March 6, 2019: Rebecca Baisden, Jemez District Archaeologist, SFNF, "Fire and Archaeology."

Wednesday April 3, 2019: Tom Swetnam, "Smokey Bear and Cognitive Dissonance in the 21st Century"

April 2019: Archaeological Society of New Mexico Annual Meeting. Silver City, NM, hosted by the Grant County Archaeological Society. More information posted on the ASNM website in January.

Watch for ListServ updates to above events.