2021-2022 Annual Report

PCRG

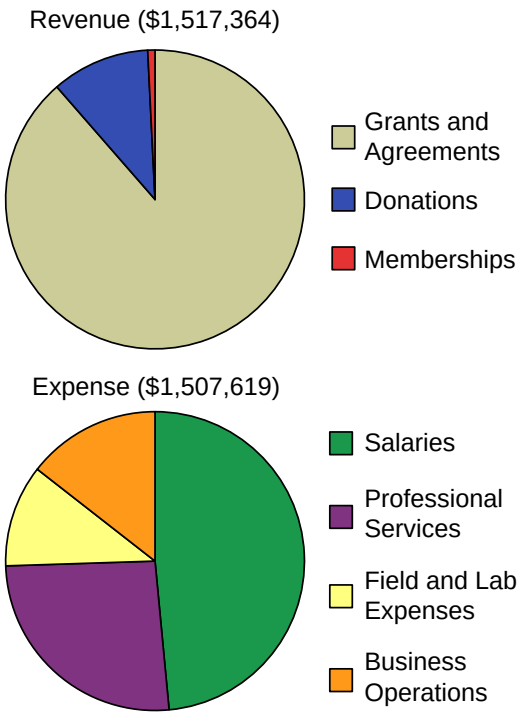
Paleocultural Research Group

State of the Organization

PCRG bills itself as a "research and education organization." Although research leads the way in our mission statement, we are reminded of the value of our educational goals each spring when PCRG members begin calling to ask about the coming summer's projects. At our desks all winter, it's easy for us to become immersed in artifact databases, curation agreements, and project budgets and lose sight of how much the experience of discovery means to the people who participate in our field projects.

The value of that experience has both personal and societal dimensions. We have all experienced the excitement of discovery: spotting a peeled ponderosa pine in the distance, uncovering an unexpected artifact, finding a stone tool last used centuries or millennia ago. It is deeply gratifying to feel these kinds of connections to the past.

2018-2022 Financial Summary



On the Cover: Late Pleistocene to Middle Holocene strata at the Mr. Peat site.

PCRG projects aim to harness those "ah-ha" moments for broader societal goals. The archaeological record is fragile. Weathering, erosion, and ongoing human occupancy all affect what remains of past lifeways. Minimizing the rate of attrition requires active stewardship, a crucial wellspring of which is the excitement people feel when they catch a glimpse of the past.

The commitment of our citizen-science volunteers—a natural extension of their desire to learn about the past—is what has kept PCRG going. There is no question that we need to understand the significance—through research—of what has been discovered. But preservation of the archaeological record and, ultimately, PCRG's continued health, depends as much on our educational mission as it does on our research.

Late in 2021 we reported that PCRG had weathered the worst of the coronavirus pandemic. SARS-CoV-2 is still with us, but its effects on organizations like ours have diminished. The past two field seasons were successful: we carried out a total of 12 projects and all were well-attended and productive. This would not have been possible without the dedication and enthusiasm of our many volunteers.

Our successes in the field have been matched by consistent financial performance. The pie charts on this page show our revenue and expenses over the last five years. While almost 90 percent of our revenue has come from grants and agreements awarded by federal and state agencies, member donations have made up a significant share. The generous support of our members has enabled needed equipment and software upgrades and allowed us to take on projects that would otherwise be hard to fund.

About half of our expenses consist of staff salaries and associated payroll costs. Business operations—primarily rent—amount to about 14 percent. Most other expenses are tied directly to project activities.

As we prepare for our 26th field season, we can report that the state of our organization is strong. Owing to your participation and support, we foresee many productive years ahead.

Pathways and Places

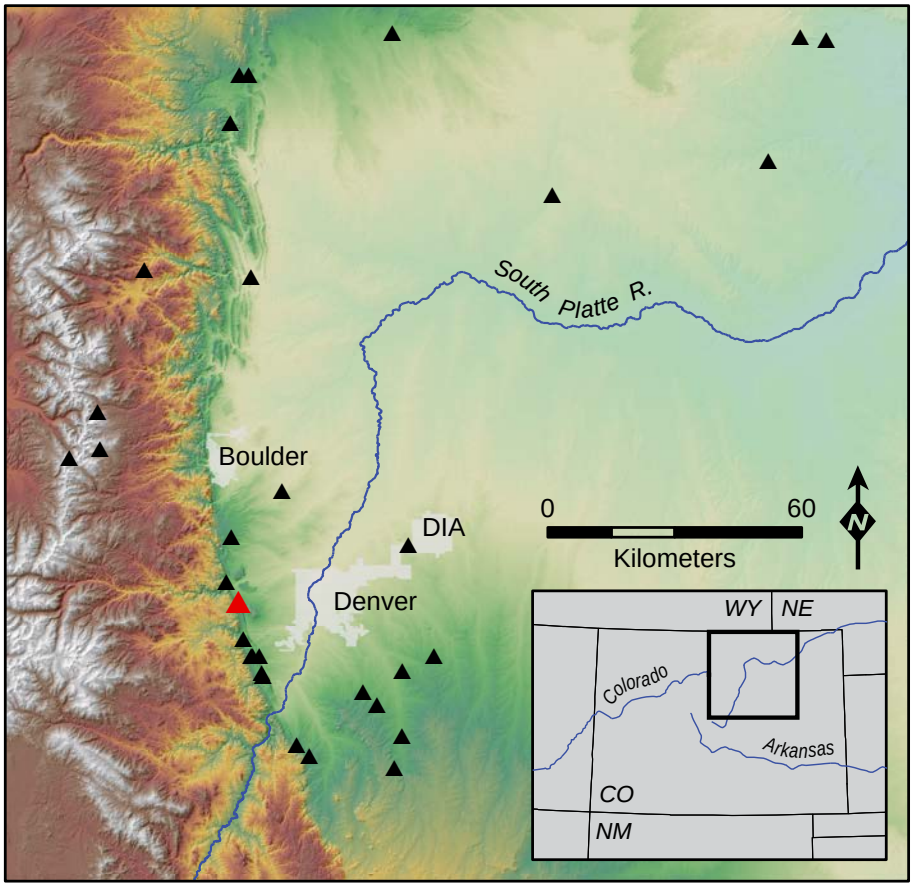
New Data on Early Ceramic Mobility from the Magic Mountain Site

Mark D. Mitchell and Christoper M. Johnston

Archaeologists have long recognized connections between high-elevation sites in Colorado's northern mountains and low-elevation sites in the adjacent South Platte River basin. Those connections—especially the presence of raw materials from low-elevation sources at high-elevation sites and, conversely, the presence of raw materials from high-elevation sources at low-elevation sites—have prompted important research on the broader study of landscape-level human mobility. Perhaps the best-known contributions to that research are Jim Benedict's studies of high-elevation sites in Colorado's Front Range, which established a systematic framework for investigating seasonal mobility.

The more complex of the two mobility models Benedict proposed, which he called the "rotary system," was especially important during the Early Ceramic period, from about 1,850 years ago to 800 years ago. The map illustrates the distribution of well-documented Early Ceramic period sites in northeastern Colorado.

Under Benedict's rotary model, small Early Ceramic bands left their winter base camps located in the sheltered hogback valleys between the foothills and the plains during the spring and traveled northward along the mountain front. As the snow disappeared from the high country, they drifted westward into the upper elevation basins bordering the Front Range. During the



Map of northeastern Colorado showing the locations of known Early Ceramic period sites (black triangles) and the Magic Mountain site (red triangle).

late summer and fall, now aggregated into larger groups, they approached the crest of the Front Range from the west, where they used communal game drives to stockpile meat and hides before returning to the edge of the plains for the winter.

Missing from many discussions of seasonal mobility models are data from Early Ceramic sites located on the southern edge of the Denver Basin. The largest and best-known of these is the Magic Mountain site. To better understand Early Ceramic mobility patterns, in 2016 PCRG, the Denver Museum of Nature & Science, the University of Kansas's Odyssey Archaeological Research Program, and other organizations initiated the multi-year, interdisciplinary Magic Mountain Community Archaeology Project.

In addition to large-scale public involvement, the project featured extensive geophysical surveys, geoarchaeological sampling and analysis, and testing of 14 Early Ceramic features. Importantly, the project investigated portions of the site that had not previously been studied. Subsequent laboratory studies focused on the identification of stone tool raw material types—the backbone of mobility model research—as well as on the geomorphic context and chronology of the site's Early Ceramic occupation and on aspects of Early Ceramic lithic technology and subsistence.

Key to the analysis of mobility patterns was the identification of lithic raw materials imported to Magic Mountain from distant sources. Previous studies have identified at least four imported materials in hogback valley assemblages, including three mountain sources and one plains source. The table below lists

View to the east during the 2018 field investigation at Magic Mountain. The ridge in the middle distance marks the eastern edge of the hogback valley. (Photo by Roger Wicker; © Denver Museum of Nature and Science.)

Sources of imported stone found in hogback valley assemblages.

Source Name	Region	Distance and Direction from Magic Mountain
Windy Ridge quartzite	Mountains	140 km northwest
Kremmling chert	Mountains	100 km west-northwest
Trout Creek jasper	Mountains	125 km southwest
Flattop chalcedony	Plains	200 km northeast

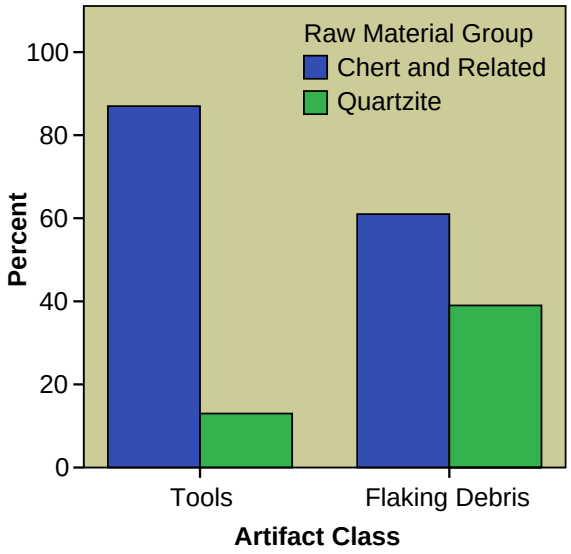
those sources and shows their direction and straight-line distance from Magic Mountain. Tools or flakes from even more distant sources in Wyoming, Texas, and New Mexico also have been identified in hogback valley assemblages.

The studied flaking debris assemblage included about 15,500 specimens dated to the Early Ceramic period. Of those, just 27 flakes—less than 0.2 percent of the assemblage—possibly or certainly were imported from one of these distant sources. The table on the bottom of the page compares the Magic Mountain results to those for other Early Ceramic sites. As is true for other sites on the southern edge of the Denver basin (the first four listed), very few imported materials are present at Magic Mountain. By contrast, Early Ceramic sites farther north (especially Rock Creek and Valley View) include materials from mountain sources, just as Benedict's rotary model predicts.

The lack of lithic raw materials from high-elevation sources at Magic Mountain does not indicate that the rotary model is incorrect. Rather it indicates that different Early Ceramic groups used the landscape in different ways. This suggests that the economy of the Early Ceramic, which after all spans more than a millennium, was more variable than previous mobility models have recognized.

The near absence of lithic raw materials imported from distant sources also does not indicate that the people who inhabited Magic Mountain did not follow their own seasonal pathways. As the chart on this page illustrates, the two major raw material types are differentially represented among chipped stone tools and flaking debris. Chert tools are overrepresented relative to chert flakes, suggesting that many of the chert tools in the assemblage were made elsewhere and discarded at Magic Mountain. Quartzite—which is available close to Magic Mountain—is overrepresented in the waste flake assemblage. This suggests that tools made from quartzite were produced at Magic Mountain and subsequently taken to the next camp in the group's seasonal round.

The full results of the Magic Mountain Community Archaeology Project are available on PCRG's website at https://paleocultural.org/Research/magic-mountain/. You can read more about the project's community involvement at https://doi.org/10.1080/20518196.2021.1972560.



Bar chart showing the proportions of tools and flakes made from two different types of stone.

Proportions of local and imported stone present at selected Early Ceramic sites.

	Origin		
Site	Local	Imported	Sources Represented
Magic Mountain	*99.9*	*<0.2*	Kremmling, Windy Ridge, Flattop, Trout Creek, Obsidian (ID and NM)
Ridgegate	*99.5*	*0.5*	Source(s) unspecified
Oeškeso	*99.0*	*1.0*	Alibates (TX), Kremmling, Trout Creek
Van Ness	*100.0*	*0.0*	No imported materials identified
Rock Creek	*90.0*	*10.0*	Kremmling, Windy Ridge, Trout Creek
Valley View	*91.0*	*9.0*	Kremmling, Hartville chert (WY)
Cass	*95.0*	*5.0*	Flattop Butte, petrified wood

Notes from the field, 2021–2022

Mr. Peat

May 15, 2021: Excited to get back into the field after missing the entire 2020 season! We're starting at the Mr. Peat site, a Late Pleistocene-Early Holocene relic wetland in the San Luis Valley. Mid-May seems pretty early for this elevation—hope it doesn't snow!

May 18, 2021: Snow this morning! But we learned a lot in the last few days. It will be interesting to compare the results with the data from the Scott Miller site, another relic wetland in the Valley that Chris studied earlier this year.

Cambium Trees

June 13, 2021: Our camp at Turkey Springs is one of the most idyllic spots in Colorado. We're all excited to continue our study of peeled ponderosas. It's a different kind of survey—rather than searching for artifacts on the ground, we need to look up and in the distance to locate peeled trees.

June 18, 2021: Last day of the peeled tree survey. What an amazing crew! We located and documented 77 peeling scars, nearly one-third more than on our 2018 survey. Learning from Ute elders about this fragile resource was a moving experience.

North Park

July 1, 2021: Back in North Park for the third summer, this time to gather geoarchaeological data at a site with pottery, bison bone, and chipped stone tools. How old is this site? We will collect some soil samples to date, and hopefully some diagnostic artifacts to help us better understand 5JA712 (the Nada site).

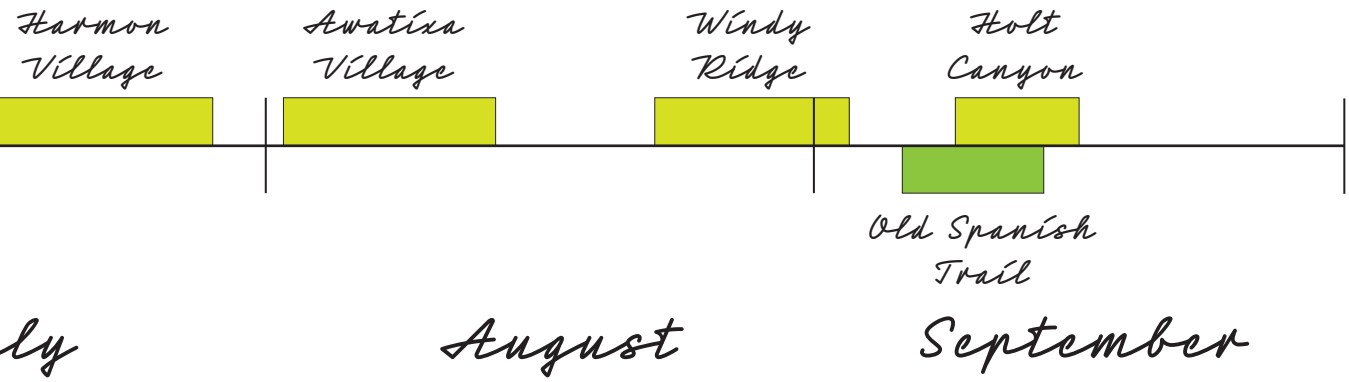
July 6, 2021: MOSQUITOS! They are everywhere. But a fantastic crew has persevered and moved a ton of dirt. Great geoarchaeological data, but not a single artifact from the Nada site was uncovered.

July 15, 2021: We're packed and ready for the longest field session we've had in many years. We'll spend 11 days at Harmon Village, about 10 miles north of Mandan, North Dakota, then

spend another 10 days at Awatixa Village, one of the large Hidatsa settlements at Knife River Indian Villages National Historic Site.

(continued on page 8)

Above: *Overview of the Nada site in North Park with the crews doing geoarchaeological investigations.* ***Below:*** *Bone embedded in the peat at the Mr. Peat site. The site is littered with bone fragments, many of which likely represent bison.*



Harmon Village

July 23, 2021: Intriguing results so far. We knew that Harmon was small, but knew nothing about its age. It definitely dates to the fur trade era; the pottery and trade goods seem to indicate a date in the mid-1700s. Most surprising is the discovery that the village's fortification appears to be unfinished.

July 28, 2021: This site is unlike any other we've studied in the Heart River region. Particularly unexpected are the small sizes of the houses and the lack of bison remains. No time to think now about what it all means—we're on to the next project.

Awatixa Village

August 2, 2021: We're all hoping that the next two weeks will be cooler than the last two! Awatixa Village—once home to Sakagawea, who accompanied Lewis and Clark—is one of the best-preserved Indigenous communities in the northern Plains. The view from the bank above the Knife River early in the morning is not to be missed.

Left: *One of the 172 peeling scars documented during the 2021-2022 cambium trees project near Pagosa Springs, Colorado.* ***Below:*** *Excavations at the Harmon Village site in 2021. Smoke from wildfires in the west settled in over the Missouri River Valley most days during the project. This, coupled with hot days, meant some earlier than normal departure times during the project.*

August 7, 2021: By combining extensive magnetic survey data with data from a handful of small test excavations, we've been able to learn a great deal about the history of the settlement. We're looking forward to starting the lab phase of the project.

August 12, 2021: That's a wrap on two amazing projects! The crew is tired after more than three weeks in the field, but we're all pleased with the outstanding results.

Windy Ridge Quartzite Quarry

August 23, 2021: Great to be back in the mountains and out of the heat. We'll use our results from the 2019 survey to set some excavation units and learn more about the workshop area north of the quarry.
August 29, 2021: Burrowing animals sure have done a number on any hope of stratigraphic separation in the workshop area. We are still getting some great data on artifact densities and chipped stone technology from one of the largest quarry sites in the west.

Holt Canyon Camp

September 12, 2021: We thought we'd left the hot weather behind in North Dakota, but the thermometer read 110° this afternoon. Still, our work in Holt Canyon has proved to be informative. Southeastern Colorado's canyon country is a little-known gem!

Sommers Site

May 14, 2022: The view of the Missouri River from the site is spectacular. A wet spring has gifted us a vibrant green landscape. We've never done geophysics in a bean field before, but the results have been outstanding. The number of earthlodges at the site is even higher than previously realized.

Chancellor Ranch

May 24, 2022: Who knew a road could be that muddy? We managed to make it to base camp—barely. But everyone is eager for the work to begin—at 50,000 acres, Chancellor Ranch is

(continued on page 10)

Upper right: *Kevin and the crew on the Windy Ridge project made atlatl throwing a nightly activity, thanks to Larry for the gear and lessons! (Photo by Craig Johnson.)* ***Right:*** *Craig and Rodney excavating a pit inside an earthlodge depression at Awatixa Village in 2021. The boom lift helped capture some nice overhead shots.*

among the largest state-owned properties but has never been surveyed.

May 30, 2022: From a distance the property appears to consist of open, rolling plains. Only when you begin walking do you realize that it's cut by deep, cliff-bordered canyons. Dozens of rock shelters dot the canyon walls.

June 1, 2022: More rain, coupled with a Covid scare, pushed us out of the field earlier than hoped. We'll come back in August to wrap things up for a few days, and hope for many more field seasons on this amazing property!

Cambium Trees

June 19, 2022: The theme of the summer appears to be "rain." Drove to camp in a deluge, but everyone is in high spirits.

June 23, 2022: We must have the hardest-working crews in the business. Just four days in and we've documented 95 peeling scars—18 more than we documented last year in five days. Our study area this summer must be the largest single cluster of peeled ponderosas in Colorado.

East Branch Wickiup

July 9, 2022: Productive first few days mapping, drawing, and photographing a wickiup thought

Upper left: *Met on the screen at Holt Canyon in 2021. While it was incredibly hot, the crew hung in there and we learned some great things about southeastern Colorado archaeology.* ***Left:*** *Dan, Met, Ann, and Will (PCRG Field Technician) taking in the amazing views (and archaeology) at Chancellor Ranch. (Photo by Larry Hansen.)*

to be from the 1870s. Hope to confirm this with the data we are gathering.
July 14, 2022: What a way to finish four field seasons in North Park! Great crew, neat site, maybe found another wickiup on survey, and perfect summer mountain weather with evening storms, crisp mornings, and perfect days.

Old Spanish Trail

September 5, 2022: Last project of the 2022 season! Our crew of 11 Colorado College students has spent the past week in class, learning about survey and site recording methods. Now it's time to put that training to the test.
September 13, 2022: Everyone is tired, but what a great way to wrap the field season. We couldn't have asked for better weather—crisp evenings and sunny, still days. Our survey of the bajada north of Crestone, Colorado yielded important new information on the Archaic occupation of the San Luis Valley. And the trail traces we documented—based on recently acquired lidar data—add important new information to our understanding of early transportation routes.

Upper right: *Volunteers, along with Curtis Martin (standing in the midground), work to clear vegetation and begin mapping the East Branch Wickiup in 2022. (Photo by Will Kane.)* ***Right:*** *Will and Colorado College students doing close interval survey along trail traces in the San Luis Valley to round out the 2022 field season.*

A View from the Trenches

Larry Hansen, Met Innmon, Bruce Holloway, and Ann Holloway

PCRG field season is a highlight of our year! As avocational archaeologists, we learn so much from each project. The techniques for field work, the thought process that goes into project implementation, and listening to the pros discuss and work through ideas all helps us grow each project. We love getting to do hands-on archaeology, from survey to excavation and contributing to the overall success of a project. We were all very excited to get back in the field after the disappointment of 2020!

Our 2021 volunteer season got off to an early start with the Mr. Peat project in Alamosa. This early season survey project gave us the opportunity to brush up on our observation skills and meet new volunteers and staff. It was a fascinating mix of chipped stone tools, ancient bison bones, and modern trash. It felt great to be back out in the field and see old friends.

In July, we travelled to North Dakota to work at Harmon Village. The project included many retired professional archaeologist volunteers, and we were able to learn so much from them. The contrast between Plains archaeology and Rocky Mountains archaeology proved interesting. The behind-the-scenes tour of the North Dakota Heritage Center helped us learn more about the big picture of the history of the area. The days were hot, but the Missouri River offered some respite and the fog on the river in the morning was beautiful. It was a great chance to catch up with volunteers from the area.

Windy Ridge is one of our favorite places in the mountains of Colorado and offered warm days and cool nights. Better access to the site meant a two mile a day hike instead of the five miles we did in 2019 and that left us with plenty of energy to practice atlatl throwing with Larry as our instructor. Working with Chris in his hometown as well as the camp logistics creates a great team experience on the projects there.

Finally, in September, (it's supposed to be cooler, right?), the Holt Canyon project was a memorable one. With temperatures reaching over 105 almost daily and migrating tarantulas—including the one travelling up Chris' leg—made for an unforgettable project that tested every one of us. The beautiful prairie setting and the interesting discoveries made it all worthwhile.

Here's to another field season getting dirty and learning more about our past.

The authors are long-time PCRG volunteers and have volunteered over 2,700 hours on PCRG projects since 2017.

Fern E. Swenson (1954-2022)

The PCRG family is deeply saddened by the passing during 2022 of Fern Swenson, a stalwart member, resourceful collaborator, and cherished friend.

Fern was an unrelenting advocate for archaeological research and historic preservation in North Dakota, where she served most recently as the Deputy State Historic Preservation Officer and Director of the Archaeology and Historic Preservation of the State Historical Society of North Dakota. Under Fern's leadership over the course of more than 25 years, researchers from numerous universities and nonprofit organizations carried out investigations at the principal Plains Village settlements located near the confluence of the Heart and Missouri rivers. Fern was also a leader in historic preservation. She worked tirelessly to protect and preserve the many sites managed by the State Historical Society. Her signature historic preservation initiative was the stabilization of Double Ditch Village, one of the largest and best-preserved Plains Village settlements in the state.

Fern joined PCRG in 1998, just a year after it was founded. Her ongoing and steadfast support for PCRG is evidenced by the numerous projects we completed together over the past 25 years. In addition to project design and major logistical and technical support, Fern was always happy to welcome our volunteers. Each year she led tours of the amazing State Historical Society facilities in Bismarck, a noted highlight for many project participants. Most importantly, she was our friend and a friend to so many others. PCRG extends deepest condolences to Fern's family and to all who loved her. We will miss you, Fern.

2021-2022

by the numbers

12	6,824	80
Field Projects	*Volunteer Hours*	*Field Days*

PCRG Members' Activities

Rob Bozell

2021 was my last year of being formally employed as an archeologist. I retired from the History Nebraska, State Archeology Office on December 31, 2021, where I had been employed for most of the past 37 years. I plan to pursue completing various excavation reports and other research projects but at a more relaxed pace. I worked closely with History Nebraska colleague Courtney Ziska and PCRG member Phil Geib in wrapping up a large report on our 2016-2019 Nebraska Sand Hills survey and testing project. The project included survey of nearly 10,000 acres, discovery and evaluation of 293 sites, and excavations at the Dismal River Aspect Humphrey site. The State Archeology Office also consulted with PCRG members Bob and Kay Nickel on several geophysics projects including searching for the Genoa Indian School cemetery and 1840s graves of Mormon pioneers in north Omaha.

I completed analysis and reporting of large faunal samples from the Tobias site in central Kansas. Tobias is a proto-Wichita village, and the work was done for the Kansas Historical Society. PCRG member Carl Falk helped with some problematic identifications. Carl and I also began dusting off an old faunal project involving a collection from the Deadwood, South Dakota Chinatown excavations. We will be collaborating on a report in 2022.

The only travel I made was two trips to Colorado. One for the Plains Conference in Boulder (great time!) and a beautiful autumn Amtrack ride with my wife from Fort Morgan to Glenwood Springs. Amtrack is a fun way to travel unless you are on tight schedule—or any schedule for that matter!

John Craig

My first experience operating a metal detector for an archaeological project was quite a memorable one, as a volunteer crew member for all the archeological surveys at the Little Big Horn National Monument during the 1980's.

The results of our findings were significant in answering some of the questions that have prevailed at the battlefield since 1876. For instance, the detection, recovery, examination, and mapping of the many metal cartridge cases from both army and Native weapons used on the field that day provided the archeologists with a map of previously unknown movements on the field of battle. Like fingerprints, no two cartridge cases are alike; each firing pin impression is unique when viewed under a microscope. For the whole story, I highly recommend *Archaeological Perspectives on the Battle of the Little Bighorn*, by Douglas Scott, Richard Fox and Melissa Conner (1989).

During the 30 plus years since, working mostly with the University of Oregon Research Division of the Museum of Natural and Cultural History, I have had many opportunities to use a metal detector, almost exclusively for historic projects, such as locating cabin and fort sites, lost battlefields, and old railroad beds.

More recently I have been working with a crew under the direction of Melissa Darby in a search for evidence that Sir Francis Drake landed

Craig: *Melissa Darby and John Craig metal detecting in 2021 on the Oregon Coast in the vicinity of Whale Cove.*

on the Oregon Coast. Our metal detection efforts are currently being analyzed. Melissa's recently published book, *Thunder Go North: The Hunt for Sir Francis Drake's Fair & Good Bay* (2019), is a compelling, well-researched read.

While I agree a metal detector should never take the place of a trowel, screen and a well-dug unit, for historical projects especially, it is a handy item for the archaeologist's toolbox.

Carl Falk

Yet another year of SARS-CoV-2, and a second year without significant travel: nevertheless, new and continuing projects kept me busy in 2021. The year began with further analysis of animal bone from PCRG's 2019 investigation of Awatixa Village, Knife River Indian Villages NHS. Work in 2021 focused on technical description of tools, tool fragments, and decorative pieces, along with identification of fine-screen bone samples. Awatixa Village research will resume in 2022 with added materials from PCRG's 2021 investigations. During the spring and summer, I continued work with bone from PCRG's 2015 and 2016 NSF-sponsored excavations at Chief Looking's Village, Bismarck, ND, concentrating on the diverse sample of bird remains, fine-mesh waterscreen samples, and analysis of modified specimens. Work on the Magic Mountain project was rebooted in the final few weeks of the year. Specimen identifications were confirmed and preparation of a chapter on vertebrate remains for the final report began with work continuing into 2022.

Additional projects during 2021 included a bit more work with Rob Bozell on fauna from the Tobias site (Kansas), and—again with Rob—planning for a paper on faunal remains from Deadwood (South Dakota) Chinatown. I aided Craig Johnson's work with the Extended Middle Missouri Ben Standing Soldier assemblage, helping organize identification of bison remains and undertaking an examination of non-bison remains – a mix of fish, bird, and medium to small-sized mammals.

Lastly, I continued my 25-year involvement with PCRG, serving as Vice President and a member of the Board of Directors.

Kim Field

I serve as the chair of the City of Littleton's Historic Preservation Board (HPB). I am thrilled to report that the Littleton City Council approved the Littleton Downtown Historic District in October 2021! The district includes Main Street and Alamo Avenue, the core of the original city. The new all-inclusive district encompasses 82 structures, 69 (or 84%) of which are contributing. Overall, the district is remarkably intact, with the period of significance exemplifying Littleton, 1870 to 1975.

Main Street was listed on the National Register of Historic Places in 1998. However, Alamo Avenue—which constitutes part of the original platted city area—had never been seriously considered. HPB members worked two years to establish the character and integrity of the avenue, and research and justify the district boundaries. They developed significance criteria, surveyed every property, and determined the integrity of each building and whether it contributed to the historic district. We found

Field: *Littleton Town Hall (built in 1920).*

that many building facades within the district have kept their original historic design, while several facades have been changed, reflecting later periods of development. Alamo has not changed its appearance since the mid-1960s, and six of its sixteen buildings are pre-1900.

The architectural styles represented include nineteenth and twentieth century Commercial, Italianate commercial, Italian Renaissance Revival, English/Norman Cottage, Queen Anne, Art Moderne, Modern Movements, Classic Revival, Colonial Revival, Bungalow, Vernacular Wood frame, and Mid-Century Modern. It includes the J.J.B. Benedict-designed Littleton Town Hall (1920), recognized as the "the finest town hall for a small American City," Carnegie Library (1916), and Littleton's oldest building, the J.D. Hill General Store (1872).

Downtown Littleton does not exist in a diorama. It is a vibrant downtown with shops, a performing arts center, offices, professional services, eclectic retail, restaurants, bars, and residential. The HPB manages a robust grant program to help individual property owners shoulder the costs of caring for historic properties.

Amy Gillaspie

I was fortunate to experience and participate in two new wonderful and important archaeological projects in 2021. June and July saw the excavation of the public Astor House Community Archaeology project that I was thrilled to lead with Co-Principal Investigator Dr. Michele Koons of Denver Museum of Nature and Science, in partnership with Metcalf Archaeological Consultants and Foothills Art Center. The project was an incredible success, with many personal items and items from the historic boarding house recovered from the back yard excavation. Tours were offered by Community Connections, LLC., and we had well over 300 visitors to the site over three-and-a-half weeks of work.

In August, I traveled to Pas-de-Calais in northern France to work as a Crew Chief on a Department of Defense POW/MIA Accounting Agency (DPAA) recovery mission with CSU's Center for Environmental Management of Military Lands. An incredible team of scientists, students, and metal detectorists from Colorado worked alongside U.S. Veterans and French citizens toward recovering the remains of a pilot lost in 1944 during World War II when his plane crashed after being hit by flak. The DPAA mission will return to the region to continue the project in 2022.

The eventful year ended with my being hired on as Assistant Project Archaeologist at PCRG! I am grateful and delighted to be back to working with PCRG after interning with them during 2017-2019 on the Magic Mountain project.

Gillaspie: *The 2021 DPAA/CEMML Team in Northern France.*

Pete Gleichman

I have been fortunate to get in the field a couple times in the past year. Native Cultural Services in conjunction with True Position Surveying-Nevada has been doing digital scans of architectural sites on Cedar Mesa, Utah for the BLM. We are now using a Trimble X7, which

Gleichman: *Owl Canyon Ruin 3 granaries and a Kiva.*

Gryba**:** *Microblades and a 4.5 cm microblade core made from Swan River chert.*

does 500,000 survey points per second, so in a short time a point cloud of many million survey points is created. The point cloud produces accurate 3D images and plan views. (This is similar to lidar but uses only the visible light spectrum). To date we have scanned the Green Spring Great Kiva, Arch Canyon Great House, Cold Springs Ruin, Many Hands, Long Fingers, Many Windows, Owl Canyon Ruin, Dry Wash Towers, and Fortified Mesa. Other projects are in lockdown mode—or slowly creeping forward.

Eugene Gryba

Since the start of the pandemic, teaching and archaeological meetings here in Calgary have been shifted largely to online learning. The lithic technology sessions that I enjoyed leading students from the University of Calgary have been indefinitely postponed.

Still, never one for remaining idle, I have continued my passion with flint knapping. In 2021 the Archaeological Survey of Alberta published a paper on microblade technology that I had been working on for several years. The paper, titled *A Personal Perspective on Microblade and Microblade Core Variability in Northeast Asia and Northwest North America*, is freely accessible online and is linked in the PCRG Members Publications page at https://paleocultural.org/memberpubs/. It has now received worldwide attention.

Hopefully the Canadian Archaeological Association conference—which had been scheduled for Edmonton and has been postponed for the past two years—will take place in April, 2022, and the meeting will offer me an opportunity to share my knowledge on lithic technology.

Dale Henning

I failed to send a message out last year, likely because of the tour over the holidays, and being 'shut down' due to the pandemic. Our life of travel and adventure ended upon return from a Caribbean tour over Christmas-New Year 2019-20, which took us up the navigable portion of the Amazon (in an ocean-going vessel), an astounding 1,000 miles. I continue research on Late Prehistoric Oneota, trying to stay focused on their activities in the western Prairie Peninsula. This project was designed to end with the earliest Oneota there but has grown into consideration of Oneota from beginnings into the contact period. My revised goal is to finish sometime in 2022. Generally, good health prevails in the Henning household. My pacemaker does what it should and both of us have been 'down in the back' this past year but

PCRG Members' Activities

cannot complain. After all, I celebrated age 90 last June and am still going, slowly, of course. We have taken all vaccinations and the booster with no ill effects and no Covid! My best to all!

Craig Johnson

I was very active this year. Unlike previous years where I volunteered for no more than two PCRG field projects, I decided to do three after a 2020 off-year. The first was Harmon Village, which was unusual in several respects. Our excavations recovered a relatively small number of artifacts. The weather was most memorable, characterized by all days reaching over 95 degrees. Fortunately, the evenings and nights were considerably cooler. The weather was more temperate during the Awitixa project; it was interesting since it brought back a number of volunteers and students from the 2019 season. I took up golfing this year, bringing my clubs with me and playing five 9-hole and three-18 hole rounds after fieldwork and on days off. I also had a chance to experience Colorado high country archaeology by volunteering for the Windy Ridge project. It was the most physically challenging PCRG project I have experienced, characterized by very cold nights, temperate days, and demanding hikes up to the site. A visit to the quarry locale made me appreciate the effort prehistoric peoples put in to procure flakable stone.

Other archaeological-related activities rounded out the year. I borrowed the unmodified bone from the Ben Standing Soldier site, a Plains Village community located in North Dakota. My task was to identify the large quantity of bison bone, assigning each piece to its element, side, and portion. It proved to be an educational experience. This information, along with a similar dataset from Carl Falk for the non-bison, will be used in one chapter of a site report. Finally, I wrote a paper about my 1971 field school experience, to be published in the *Minnesota Archaeologist* in 2022. Dale Henning directed this life-changing event, which led to my career as a professional archaeologist.

Johnson: *An Archaeologist's Lament: My mood prior to undertaking the identification of the bone from Ben Standing Soldier.*

Richard and Katherine Krause

2021 was not a memorable year. A planned November trip to Greece and Turkey was postponed until the fall of 2022. In its place we visited our son Michael in Norman, Oklahoma, where he is enrolled in Oklahoma's graduate anthropology program. We then continued west to Colorado to tour Mesa Verde, and Canyons of the Ancients National Monument. Much of Mesa Verde was closed, but we were able to visit sites I worked on with Dave Breternitz in the 1960's and view a well-done life-sized cardboard cut-out print of Dave at the Museum in the Canyons of the Ancients National Monument. From here we drove south to New Mexico's Aztec and Salmon Ruins, then over to Taos and then proceeded east to Clinton, Oklahoma, to visit Pat Henry at the Mohawk Store. Pat is an old friend who has a truly remarkable collection of Native American, mostly Southern Cheyenne, beadwork, some of which she is willing to sell at very reasonable prices. Pat is the third generation of Mohawk Store owners and has in her possession ledger books detailing the store's transactions with Native Americans from the nineteenth to

twenty-first centuries. The ledger books include the names, ethnic identities, and ages of Native craftsmen and craftswomen, and the prices and conditions of sale for each transaction. From Clinton, we returned to Alabama with several recently crafted pots purchased at Salmon Ruins and a pair of beaded moccasins that put my transaction in one of the ledger books at the Mohawk Store.

In 2021, I wrote a review of Steve Bakers' *Juan Rivera's Colorado, 1765: The First Spaniards Among the Ute and Paiute Indians on the Trail to Teguayo*. This book was a well-documented and beautifully illustrated ethnohistorical tour de force that details Juan Antonio Rivera's two entradas into western Colorado. The entradas' participants covered 1,300 treacherous miles of mountain terrain in 70 days. These journeys were so well described and illustrated in Baker's book that I wanted to follow portions of at least one of them, which my wife and I did shortly after my review was published in *Plains Anthropologist*.

I delivered a paper titled *The Culture History Theory of Artifacts* at the 78th Annual Plains Anthropological Conference in Boulder, Colorado. In my presentation I argued that the fundamental units of description and analysis in the archaeology of the twenty-first century—namely attribute, mode, artifact, feature, association, component, and site—were worked into an empirical theory of artifacts by culture historians in the latter half of the nineteenth and first half of the twentieth century. My son Michael was also the author and discussant of a Plains Conference poster presentation titled *A Cross-Ranch Suitability Model*. It was his first venture in the academic side of the Cultural Resource Management world. He seemed to enjoy it. I continued my effort to produce a reasonably complete and believable monograph on the archaeology of the Arikara Medicine Lodge. I am still struggling with a book on prehistoric events and practices in the

Krause: *Michael Krause presenting his poster at the Plains Anthropological Conference in Boulder.*

Alabama portion of the Tennessee Valley and a monograph on the role of the Sumpter site (14OB27) in Central Plains prehistory. For the latter I will attempt to detail the transformation of Late Woodland stage Keith variant garden plot cultivators into an early eleventh century version of the Solomon River phase swidden farmers of the Central Plains mosaic.

Obi Oberdier

This year started with a fascinating excavation in the Sun Valley neighborhood of Denver. Construction crews uncovered numerous structures from the late 1880s and I helped monitor, excavate, photograph, and map the site. I had the fun opportunity to profile the sediments inside and outside buried brick structures that were over twenty feet tall. One such feature was a roughly twenty-four foot deep well, with a penny from 1889 at the very bottom. I reported on our findings at the 2022 meeting of the Colorado Council of Professional Archaeologists in Denver.

After Sun Valley, I did five months of survey in southern Colorado and northern New Mexico. This work was especially rewarding, as it was done for the Southern Ute and Jicarilla Apache nations. In addition to finding and recording many pre-contact ceramics and lithics,

PCRG Members' Activities

we mapped current distributions of culturally important plants. Close encounters with bears made this project extremely memorable.

Mid-summer, I volunteered with the Astor House Community Project in Golden, Colorado. This gave me the opportunity to excavate at a historic landmark and directly engage with the public. Excavating in the parking lot next to a Safeway is certainly an expedient way to bring archaeology to the masses!

My research on the history and archaeology of comic books crystalized into a conference presentation and an article in *The Colorado Magazine*. In between field sessions, I continue to do some part time work in the Golden Age collections at Mile High Comics.

I closed out the year monitoring construction at Garden of the Gods near Colorado Springs. So far, I haven't seen any sub-surface artifacts, but the "office view" of Pike's Peak and Kissing Camels is always spectacular!

Paul Picha

The axiom "The past is another country" rings true today more than ever. Perusal of the winter 2021-22 quarterly issue of *American Archaeology* and J. H. Elliott's "Mastering the Glyphs" in the December 2, 2021, *New York Review of Books* rekindled my interest in the Spanish entrada (*e.g.*, de Soto) and its wide-reaching impacts in the New World. The topical literature is vast in scale and diverse in scope. Notwithstanding, two recent works were thought to be of interest to the PCRG readership.

Fernando Cervantes' *Conquistadores: A New History of Spanish Discovery and Conquest* (Viking, 2020) is a masterful single-volume introduction to early (*ca*. 1492-1542) Spanish exploration and conquest. Cervantes' prose is engaging and thoughtful—complex and integrated religious, cultural, and societal matters are clearly explained. His goal "to place the conquistadores in just such a [historical] context" (p. xvii) was achieved. This narrative framework is a refreshing change to much recent "New Western History" scholarship.

Moving forward some two centuries, *Reconstructing the Landscapes of Slavery: A Visual History of the Plantation in the Nineteenth-Century Atlantic World*, by Dale W. Tomich and colleagues (University of North Carolina Press, 2021) examines the context of the second slavery and its attendant commodity frontiers. Cotton, sugar, and coffee link the Lower Mississippi Valley, Cuban Ingenio, and Brazilian Fazenda to the broader Atlantic World. The authors emphasize their "focus is the analysis and interpretation of images as documents of the historical spaces and spatial practices of the second slavery" (p. 10).

The two volumes discussed in this book are undoubtedly (ethno)historical rather than archaeologically focused; however, the material culture record remains equally essential to explanation in each instance. Happy reading!

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Lone Mountain Andesite Quarry

Ann Johnson

My main archaeological activity was getting two issues of *Archaeology in Montana* published as it has been for 30 years. However, because of the time I spent in Yellowstone and Grand Teton National Parks, I also have an interest in glassy rocks that were used to make stone tools. The most common of these are obsidian and dacite. Chemically, these have a high silica content and break with a conchoidal fracture, like glass. It is possible to chemically characterize both types to individual geological sources, so that archaeological specimens can be tied to them.

Lone Mountain is an igneous extrusion that juts up and out of the Elkhorn Mountains about 45 miles south of Helena, Montana. Lone Mountain is narrow and linear, being about 90 m high at the north end and sloping downward to the south some 400 m away, where there is a water source, a tertiary chert quarry, and multiple campsites. Two friends (Patrick Rennie and Robert Haseman) and I became aware of a map prepared by a local amateur showing where he had observed a lithic source on the northeast corner of the mountain. There were no notes describing the find. We moved forward with the assumption that since the campsites at the south end contain dacite, and the butte is of igneous origin, we were looking for a dacite exposure. Beware gentle readers.

The source area was easily located on the slope northeast of the highest part of the mountain. We observed gray to dark gray cores, primary and secondary flakes and the source area coming out of the slope. The activity of digging into the hillside and disposing of waste created an almost level area partway up the slope where there may have been a vein or layer of finer-grained, glassier material, or at least stone with smaller crystals. Early people appeared to primarily have dug or pried out stone exposed on the surface or near the surface. Chemical analysis determined this was an andesite source. Dacite, on the other hand, is glassier with a higher percentage of SiO2.

In the quarrying waste, there were many cores, with several 60 cm or larger, and large primary and secondary flakes. Beyond this dense scatter of debris, there were almost no examples of tools, broken or otherwise. We saw no hammerstones, little tertiary debris, and no prehistoric camp evidence, although an adjacent saddle would have provided a level area for camping and for initial stages of knapping. A possible reason for this is that there is no water at the source location and the people probably obtained the raw material and then went to camps at to the south end of Lone Mountain. This is speculation as we have no inventory to the north where there is another drainage and possible seasonal water.

The Lone Mountain material has a

conchoidal fracture and ranges from a homogeneous matrix where individual crystals cannot be observed to coarse matrix with easily observed crystals. These crystals do not protrude from the stone. The material is very hard but can be flaked into bifacial tools by an experienced flintknapper with modern knapping tools. It takes about twice the time to make an andesite bifacial tool than with the local chert and fine pressure retouch on the edge is almost impossible. The material tends to step fracture. It is likely that Lone Mountain andesite was used primarily when a tool with a sharp, hard durable edge was needed.

To date, we have documented the quarry on the northeast corner of Lone Mountain and obtained a site number (24BW1175). We think this is the first prehistoric andesite source documented in Montana, although others are recorded in Washington state and Nevada. We have sent samples from Lone Mountain to be characterized by EDXRF. Andesite can be fingerprinted just like obsidian and dacite if a flat homogeneous surface is chosen for analysis. We have opened a new line of inquiry where andesite tools can be identified as coming from a specific location.

The Lone Mountain source does not appear to have been extensively utilized but it is likely that archaeologists are misidentifying the raw material of tools manufactured from andesite. It is our hope we can broaden their awareness of this raw material source and type.

BEAAR Update

Scott Dersam

Studies of alpine environments across the Rocky Mountains have intensified in recent years due to the triage-like race to document the ancient past of these fragile ecosystems. A concentration of efforts in the Greater Yellowstone Ecosystem (GYE) has documented persistent widespread use of the region's high elevation landscapes over the Holocene. Recent endeavors in the Beartooth Range of Montana have documented behaviors providing explicit regional high elevation specialization.

The Beartooth range is dominated by a single alpine plateau, the High Lakes plateau, which hosts extensive concentrations of hunter-gatherer occupation. The dense accumulation of interconnected alpine lakes has a diverse resource-rich ecotone, more akin to alpine landscapes in the Pacific Northwest than adjacent ranges in the GYE. As a result, the High Lakes plateau has an array of hunter-gatherer subsistence and landscape use behaviors, more frequently found in other ecotones.

Over the summers of 2021 and 2022, the Beartooth Ecosystems Alpine Archaeological Research (BEAAR) Project partnered with PCRG for our fourth and fifth seasons of active research in the High Lakes region, documenting multiple new occupation areas. BEAAR Project and PCRG members collected data on ancient subsistence, landscape use, and occupation

duration to clarify these behaviors in mountain ecosystems over the Holocene. The team documented 47 new archaeological sites, over 16 isolated resources, and multiple aspects of chronologically linked landscape use behavior, including the first known source of lithic raw material in the Beartooth alpine. The quarry consists of a multicolored quartzite boulder field at over 10,000 feet and displays signs of intensive use. Quarry locations add significant behavioral data to an ecosystem, and many of the regions' recorded formal lithic tools (particularly from the Paleoindian and Early Archaic) are made from local quartzite.

To further our understanding of regional alpine subsistence PCRG and BEAAR volunteers tested three previously recorded occupation areas, uncovering two hearth features in 2021 and three in 2022. The hearths tested in the 2021 field season date to the Late Prehistoric (450-315±30 calBP), with intact cultural deposits below, that BEAAR plans to continue testing in 2023. Associated with the hearths were a suite of formal tools, including end scrapers, side-notched Late Prehistoric projectile points, core fragments, bifaces, ample debitage, and a nodule of yellow ochre. Additionally, fragments of burned bone and Whitebark pine seed hulls were recorded in association with both hearths.

The association of dietary data with a rich breadth of formal tools in both excavations demonstrates the diversity of behaviors and length of occupation durations taking place at these sites. Of interest is the representation of 10-15% local quartzite material use at both sites. Reliance on local raw materials has been linked with longer duration occupation behaviors in prehistory due to residents' incorporation of lesser quality local materials only when higher quality non-local materials are used up. Obsidian artifacts from the site were sourced to Obsidian Cliff and Lava Creek Tuff, both regionally close (about 30-50 miles) raw material sources.

Dersam: *PCRG and BEAAR volunteers surveying in the Beartooths in 2022.* ***Below:*** *Biface found in 2021 during the BEAAR survey.*

Volunteers continued subsistence data collection to round out the 2021 field season by actively participating in a diet breadth study. Volunteers used digging sticks and lots of energy to harvest high-elevation tubers to test their caloric value and record active resource procurement times to better hypothesize ancient subsistence strategies in the GYE alpine environments.

In 2022, tested hearth features from separate localities revealed bifaces, Middle Archaic projectile bases, extensive lithic manufacturing activities, and steatite use, potentially tied to ceremonial or ritual behaviors. A steatite elbow pipe headpiece was recovered from an ochre-rich context at 27 cmbs, between Middle Archaic and Late Archaic levels. Demonstrating the deep

(continued on page 28)

PCRG Members' Activities

Bill Billeck

This past two years have brought about several changes in my activities. In July 2021, I took over editorship of *Plains Anthropologist* for a three-year term. Article submissions are needed for the journal, so please consider sending in your research. Then in July 2022, I began phased retirement at the Smithsonian, where I will work half time for a year and then fully retire. I expect to continue in a relationship with the Smithsonian as a Research Associate and continue glass bead research and to publish on a number of collections. A recent publication is on a Chicago region New Lenox beads assemblage dating approximately to the 1620s that conforms with the glass bead chronology in Ontario. I am working on number of bead assemblages including about 2,000 from Awatixa (Sakakawea) Village (32ME11), dating from the late 1700 to early 1800s.

Rob Bozell

2022 was my first year of retirement and I really enjoy not having to deal with supervising, being supervised, staff meetings, budgets, drama, controversy, and all that comes with full-time employment. Much of the year was spent slowly chipping away at some excavation reports for various 1980s highway archeology projects in Butler, Custer, and Dakota counties, Nebraska. The sites include a Central Plains tradition farmstead, an early nineteenth-century Omaha village, and a Pawnee bison hunting camp. I also wrapped up some History Nebraska NAGPRA compliance database clean up and inventories and published an article on the history of the agency's NAGPRA and state burial law program (see PCRG Member Publications website page).

Work with animal bone is always enjoyable. Carl Falk (PCRG Vice President) and I identified additional samples of bone from the Deadwood, South Dakota Chinatown District and worked on a final report on the project. I also identified an assemblage of bison bone from the Fawcett site—a small late pre-contact kill and processing site in Hand County, South Dakota. The sample was recovered in 2017 by a small crew under the direction of PCRG member Mike Fosha. The staff at Augustana University is preparing a National Register nomination for the site and the character of the faunal collection is a component of that document.

Travel in 2022 included a very enjoyable and well-organized Plains Anthropological Conference in Oklahoma City and a couple week drive from Washington DC to northern Florida. Fun stops included: Harper's Ferry, Monticello, Shenandoah National Park, Yorktown Battlefield, Charleston, Ocmulgee Mounds, and Castillo de San Marcos in St. Augustine.

Bozell: *Duane Allman's grave in Macon, GA.*

Craig Johnson

In 2022 I volunteered for a PCRG geophysical survey of a portion of the Sommers site (39ST56), the largest known Initial Middle Missouri village. Since it is buried under 4-5 feet of loess, little damage has been done to the site from years of cultivation other than to obscure

the surface manifestations of the many houses. I had a chance to work extensively with Ken and JoAnn Kvamme, something I hadn't been able to do on previous PCRG projects. I very much enjoyed them and their company and consummate professionalism. Continuing what I began last year, where I collected data on artifacts and selected bone for radiocarbon dating from five Plains Village sites, I spent another month at the South Dakota Archaeological Research Center (SARC) collecting data on three Plains Village artifact collections in anticipation of completing site reports. During this period and the previous year, I selected many samples of bone for radiocarbon dating. The results are very promising.

Carl Falk

As last year, 2022 was challenging with work primarily focused on active PCRG projects, along with responsibilities as Vice President and a member of the Board of Directors. Major work efforts included submission of a chapter on aspects of the subsistence economy and technology of Early Ceramic period groups represented at the Magic Mountain site located near Golden, Colorado. The final report, edited by Mark Mitchell, was released in 2022 (PCRG Research Contribution 122). I also continued analysis of vertebrate remains from Awatixa Village (KNIV-NHS), concentrating on materials recovered through fieldwork in 2021. This multi-year program is scheduled for completion in late 2023. Other work included study of vertebrate materials from Harmon Village, a fortified Plains Village site located in Morton County, North Dakota. Finally, I studied a small sample of bone from the Holt site, an Archaic-period occupation located in southeastern Colorado.

In addition to the above, I finished a descriptive analysis of vertebrate fauna from the Initial Middle Missouri occupation of Nonnast village in northeastern South Dakota. Working with PCRG member Craig Johnson, I finalized descriptive studies of non-bison remains from Ben Standing Soldier, an Extended Middle Missouri village site in North Dakota, and a sample of bird remains from the multi-component Cheyenne River village in South Dakota. Late in the year, PCRG member Rob Bozell and I completed a final analysis of animal bone linked to the late nineteenth-century Chinese immigrant community in Deadwood, South Dakota. Finally, as time allowed, I continued work with vertebrate remains from PCRG's NSF-sponsored 2015-2016 excavations at Chief Looking's Village in Bismarck, North Dakota.

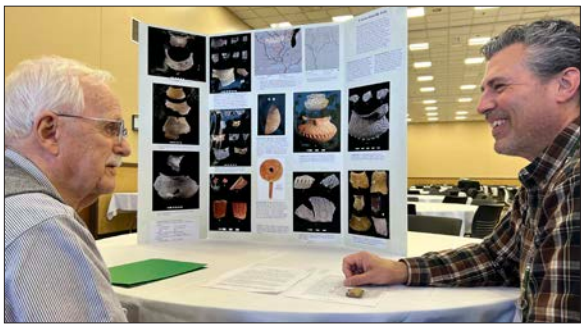
Pete Gleichman

We continue to do digital scans of standing architecture on Cedar Mesa/Bears Ears. In 2022 we completed scanning Fortified Mesa and scanned the Citadel and Tower House Ruin. Roger Echo-Hawk and I completed two papers on a retrospective view of the Colorado Council of Professional Archaeologists (CCPA) work with Native American communities, with Roger providing a prospective on future cooperation between the two groups. Both can be found on the CCPA website and linked on the PCRG Member Publications page.

Dale Henning

The year 2022 saw Barbara and me beginning the process of returning to normal which, I strongly suspect, will be different than before. We finally broke out and drove to LaCrosse, WI, to attend the Midwest Archaeological Conference, our first conference in two years! No paper, but I did present a photographic exhibit of Oneota materials from the Correctionville sites in Iowa's Northwest region as preliminary to publication

PCRG Members' Activities



Henning: *Dale and Prof. Ron Schirmer, Mankato State University, at Midwest Conference, 2022.*

of *Correctionville and the Oneota Tradition: The Western Oneota and the Correctionville Phase*. It will soon be published in digital format by the Iowa Office of the State Archaeologist. Perhaps I actually owe the time for this endeavor to the multiple covid restrictions and quarantines that have kept us at home for two years. There is hope for a few future projects that need attention, given the time and general good health that has been allowed us to this point. I look forward to seeing what other PCRG members have done over the past year.

Paul Picha

This past year of 2022 has provided an array of opportunities and experiences that reinforce the twin mantras that "no archaeologist is an island" and "it's a small world." I have continued my interest in molluscan remains though investigations and forthcoming reporting of shell assemblages from the Harmon Village and Sakakawea Village sites in North Dakota. Both projects are under the auspices of PCRG. Two other small shell samples from sites in South Dakota and Colorado, respectively, were examined and reported on as well.

Cultural heritage tourism, archaeology, and ethnohistory also came to the forefront when I had the great pleasure to participate in an Archaeological Conservancy (AC) sponsored tour of prominent archaeological sites (*e.g.*, Double Ditch, Fort Clark, Huff, Lynch Knife River flint quarry) and the new Mandan-Hidatsa-Arikara Nation Interpretive Center as well as the North Dakota Heritage Center Museums in North Dakota that was co-led by Dr. Philip Milhouse (AC Midwest Regional Director), Doug Wurtz (PCRG member), and myself. It was the highlight of my summer and the weather cooperated nicely.

Autumn brought the annual excursion to the Plains Anthropological Conference (PAC), held in Oklahoma City. The field trip to a suite of Paleoindian sites, including Cooper, was most enjoyable and rewarding. Sadly, the PAC also coincided with a memorial symposium session honoring the many contributions of long-time PCRG advocate and member Fern E. Swenson. Fern was a dear friend and fellow archaeologist of some forty-five years' standing stretching back to our initial meeting in the summer of 1976 at Mille Lacs in north-central Minnesota—hence the title of my symposium contribution--"From Mille Lacs to the Mandans."

Winter came early to Bismarck in mid-November. The white-crusted year closed out with a book review, *Archaeological Cultures of the Sheyenne Bend*, by Michael G. Michlovic and George R. Holley, that appeared in *North Dakota History* 87(1):39-40.

Rin Porter

Since I didn't get to volunteer on any PCRG projects this year, I spent some of my free time doing Lakota beadwork. I beaded each project, measuring about 8 ½ by 8 ½ inches, on canvas and mounted the finished products on deerskin. Then I attached each to a canvas tote bag with sewn-on snaps so the panels can be removed from the tote bag if desired. Hope you enjoy!

Picha: Paul Picha, Bill Peterson, Andy Clark, Doug Wurtz, and Phil Milhouse at the Fern E. Swenson Archaeological Laboratory, North Dakota Heritage Center Museum, during Archaeological Conservancy tour, summer 2022.

Jack Wheeler

I have been working on processing, cataloging, and preparing for storage thousands of artifacts from the El Pueblo Archeological Site in downtown Pueblo, Colorado since 2019. The area is home to the remains of El Pueblo, an adobe structure used as a trade post, built in 1842 and abandoned around 1856. It is the first permanent structure at the site of what would become the town of Pueblo along the Arkansas River. El Pueblo Trading Post was a diverse place, with Mexican, Euro-American, and Native American individuals living and trading together. After the foundation of El Pueblo was rediscovered in 1989, the site was excavated and eventually became the home of the El Pueblo History Museum today. The site presents impressive archeology, inducing lithic tools, historical artifacts, adobe foundations, historical foundations, railroad artifacts, and flood deposits. The site of El Pueblo not only saw different uses including a railroad line and an historic hotel, but the site was also inundated several times, most notably in the 1921 flood of Pueblo, making for fascinating strata at the site. I am currently finalizing the cataloging and storage of the last artifact class;

Porter: One of my completed beadwork projects.

Wheeler: Working on El Pueblo collections in the Emery Archaeology Lab at History Colorado.

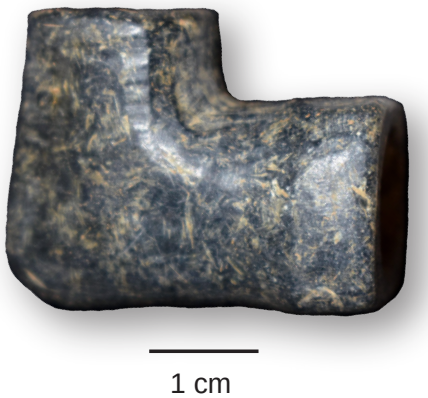
organics. Examples of these artifacts include coal, egg shell, shell, adobe, and wood fragments. The work is being conducted in the Emery Archeology Lab at the History Colorado Center in downtown Denver. Once completed, the artifacts will be kept in long term storage for future research.

Richard Wilshusen

The Covid pandemic offered me the opportunity to shift from teaching regular semester-long college courses at Colorado State University to teaching six-week-long adult continuing education courses in CSU's OLLI/OSHR program. I've been able to offer courses I have wanted to teach but were not in the approved university curriculum. Over the last two years I have taught *The Archaeology of the Mesa Verde Region in Seven Words*, *Lessons We Can Learn from Chaco Canyon*, *Colorado's Diverse Past, Imaging the Past: A Deep Dive*, *Of Monuments and the Monumental*, *The Study of Prehistoric Change, and Guatemala, Nicaragua, and Colombia: Doing Anthropology in Hot Spots*. If you are near a university or college with an OSHR program look into teaching there on the side. At its best it reminds me of the most invigorating graduate classes I have ever taught: you learn as much as the students do.

In addition to teaching and on-going archaeological research in the Southwest, I authored a chapter in a book honoring the influence of Linda Cordell on Southwest archaeology and co-authored an article in the British journal *Antiquity* on the role of volcanic climate forcing and extreme cold in hastening the widespread adoption of maize agriculture in the American Southwest (available as Open Access at https://doi.org/10.15184/aqy.2021.19). If you plan to attend SAA this year (2023) consider dropping in on the symposium in celebration of Crow Canyon Archaeological Center's forty years of innovative research. I and many others will be presenting new research that gathers together all we have learned and points to where we must focus our attention in the coming years. I hope to see you there.

BEAAR Update (*continued*)



Dersam: *Steatite elbow pipe headpiece.*

antiquity of mountain landscapes' ideologically important roles in the ontologies of GYE hunter-gatherer populations. Additional discoveries during the 2022 field season included diagnostic surface artifacts spanning the Holocene and, for the first time, potentially the Late Pleistocene.

The BEAAR Project continues to illuminate high-elevation adaptations in the central Rockies of the GYE by maintaining an annual research cycle of centralized landscape reconnaissance and site analysis. By focusing on total landscape coverage extending out from a single region, the BEAAR Project can address the issue of total mountain landscape use and adaptive change over the Holocene without limiting our interpretive analysis to a few regionally well-tested sites.