



Organization Report for 2011

The Year in Review

PCRGR staff and volunteers took on a wide variety of field projects in 2011. June saw us in northeastern Wyoming's Thunder Basin National Grassland, recording historic inscriptions. In July we followed the retreating snowline into the Colorado high country to investigate a Late Paleoindian James Allen site (photo above). As the leaves turned in September we returned to familiar surroundings at the Upper Crossing site to locate and document culturally modified ponderosa pines. You can read more about these projects in the pages that follow.

A share of my time this year was spent laying the groundwork for future projects. With our Forest Service partners I put together a Master Challenge Cost Share Agreement that will facilitate our high-altitude research program. In collaboration with researchers from two universities I prepared and submitted a National Science Foundation proposal for Plains Village research in North Dakota. PCRGR also submitted a Colorado Historical Society State Historical Fund grant for work on American Indian and Hispano sites on land managed by the Rio Grande National Forest in the San Luis Valley. We will learn over the next six months whether these efforts will bear fruit.

PCRGR staff, members, and students made significant progress on several long-standing projects this year. In the spring and summer, members of the Beacon Island research team concluded their lab work and prepared chapters for a technical report describing their findings. The draft report currently is under review by the State Historical Society of North Dakota and the National Park Service. The final will be available in summer 2012, in both paper and electronic formats. Members and staff also made significant progress on analyses of materials

from Chief Looking's Village and the Uncompahgre Cirque and Upper Crossing sites. They were assisted in these efforts by students enrolled in a combined undergraduate and graduate archaeological lab methods class taught by Dr. Catherine Cameron at the University of Colorado. Students learned about stone tool and aggregate and individual flake analyses and collected data on design motifs and cordage impressions in pottery. Student participation in these projects added important data to our analyses and gave them a chance to build their skills and experience.

For the first time we also brought middle school students into a project. In September, 25 fifth- through eighth-grade students from the Crest Academy in Salida, Colorado, along with more than a dozen adults, scoured a 50-hectare grove behind the Upper Crossing site, searching for peeled trees. The students learned about scientific research and about Colorado's native peoples. The adults were rewarded with a chance to experience through a child's eyes the pure pleasure of discovery that originally drew many of us into archaeology. In 2012, we will record stone enclosures near Upper Crossing with high-school-aged students.

As 2011 drew to a close we began work on the final phase of the Beacon Island project. This includes two tasks: exhibit development

and supplementary faunal analyses. The research team is working with Greg Harlin, a well-known and accomplished artist, to create a visual representation of the site that will be on display at the new Heritage Center in Bismarck. You can see examples of Greg's work on-line in the Frank H. McClung Museum's exhibit entitled "Archaeology and the Native Peoples of Tennessee" at <http://mcclungmuseum.utk.edu/permanent/native/index.shtml>. The supplemental faunal research focuses



Artifacts from Chief Looking's Village



on the sample of bison dentition, stable isotope analysis of both bison bones and teeth, and AMS radiocarbon dating of select micromammal dental elements.

Finally, it is my great pleasure to report that for the second time in as many years, the archaeological community has recognized a PCRG member's outstanding contributions to scholarly research and to the profession. Last year, W. Raymond Wood received the Society for American Archaeology's Lifetime Achievement Award. This year, the Plains Anthropological Society awarded its Distinguished Service Award to Richard A. Krause for his many contributions to Plains archaeology and especially to ceramic studies. Dick is the fourth PCRG members to receive the award: the Society also has recognized Ray Wood (1992), Dale Henning (2005), and Stan Ahler (2006). Congratulations, Dick!

As always, I invite you to tell me how the organization is doing. Call or send an e-mail describing your current work and interests and making suggestions for future PCRG projects. You can keep up with us on Facebook (search on "Paleocultural Research Group" from your homepage) and at www.paleocultural.org. If you find yourself in Denver, give us a call and plan to stop by the lab to see what we're working on.

Warmest regards,

Mark D. Mitchell, Research Director

Historic Inscription Recording on the Thunder Basin National Grassland

Mark D. Mitchell

In June a hardy crew of PCRG staff and volunteers and U.S. Forest Service archaeologists braved wind, hail, and lightening to record unique and threatened historic inscriptions on the Thunder Basin National Grassland in northeast Wyoming. Combining traditional recording techniques with the latest high-tech methods, the crew documented 26 panels at three sites in the Red Hills, a spectacular landscape of broad valleys and scoria-capped bluffs.

PCRG volunteers Chris Gilson, Allison Reynolds, and Kay Sargent and Forest Service archaeologists Orrin Koenig and Dennis Pry drew full-scale images of each panel on thick, transparent plastic hung from a freestanding framework placed against the rock surface. This method produces accurate full-panel renderings while minimizing impacts to the rock surface. Later, in the lab, each tracing was re-drawn on Duralar film then scanned and finally annotated in Adobe Photoshop.

Tim Urbaniak, a rock art researcher and University of Montana doctoral student who studies historic inscriptions in the Northern Plains, used two different three-dimensional laser scanners to document selected panels (photo page 3). Urbaniak's scanners create scaled point clouds that represent a scanned object or area. These point clouds can be processed to represent surfaces, which can be viewed from any angle and under different lighting conditions. The large-scale scanner, with a 300-m range and an accuracy of 2 to 6 mm, was used to capture broad-scale representations of entire rock outcrops. The small-scale scanner was used to record individual panels; its range is just 0.75 m but it is accurate to 0.75 mm.

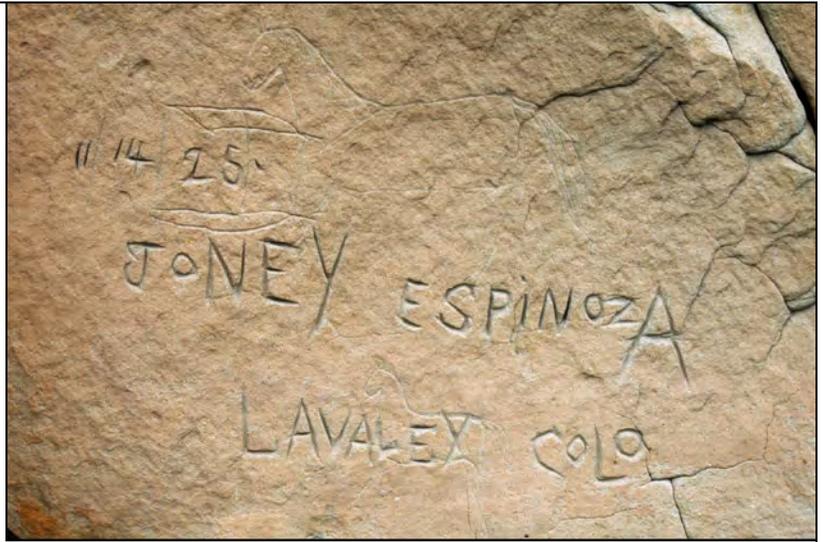
The inscriptions primarily register names of individuals, their home towns, and dates. Most authors were Hispanic: Alfonso Rodriguez, Frank Padilla, and Olivia Archuleta all left their mark. Several people inscribed

Chris Gilson (left) and Allison Reynolds tracing a panel at Thunder Basin National Grassland.



their names on more than one occasion. Salvador Archuleta and Gilbert Trujillo appear twice. “Joney Espinoza” appears on one panel (shown at right) and “Jony. E” appears on another. Most came from Colorado’s San Luis Valley or northern New Mexico, 800 km to the south. Amalia, a town on the western flank of the Sangre de Cristo Mountains, just south of the Colorado-New Mexico border, is the most common town name, appearing on seven different panels. Other towns include Taos, Costilla, and Moses, New Mexico and Capulin, Lavaley, and Fountain, Colorado.

C. M. Finley carved the oldest documented inscription on February 20, 1902, but most date between 1924 and 1948. Most inscriptions were made in during the winter: nine of the 16 dates



Top: Historic Thunder Basin National Grassland inscription

Left: Tim Urbaniak scans a Thunder Basin National Grassland rock art panel.

In his just-published synthesis of Wyoming ranching history, Michael Cassidy observes that itinerant Hispanic herders and shearers were integral to the origins and development of sheep raising in the state, but that “their names do not figure as prominently in the history” of the industry as those who put down roots. Future research on the Red Hills inscriptions will help correct that inequity.

Bottom: Evening light on the Rochelle Hills of Wyoming

indicating the month are November, December, January, or February. Three record September, two record May, one records March, and one records April. No inscriptions list June, July, and August. The most recent inscription was carved in 1959.

A few panels include representational or abstract elements. One appears to depict a hide. Two horses appear on another. A third depicts an outline handprint. Two panels contain motifs carved by American Indians in the 1700s, 1800s, or earlier. One badly eroded panel appears to show a shield-bearing warrior. A second includes a faint but unmistakable mature-style horse.



Culturally Modified Tree Documentation in the Saguache Creek Valley

Mark D. Mitchell

In September, PCRG teamed up with the Bureau of Land Management and the Crest Academy, a charter school in Salida, Colorado, to learn more about the American Indian use of the Colorado high country in the 1800s. The project brought 13 adult volunteers and 25 energetic middle-school students to the Upper Crossing Guard Station to locate and document culturally modified ponderosa pine trees.

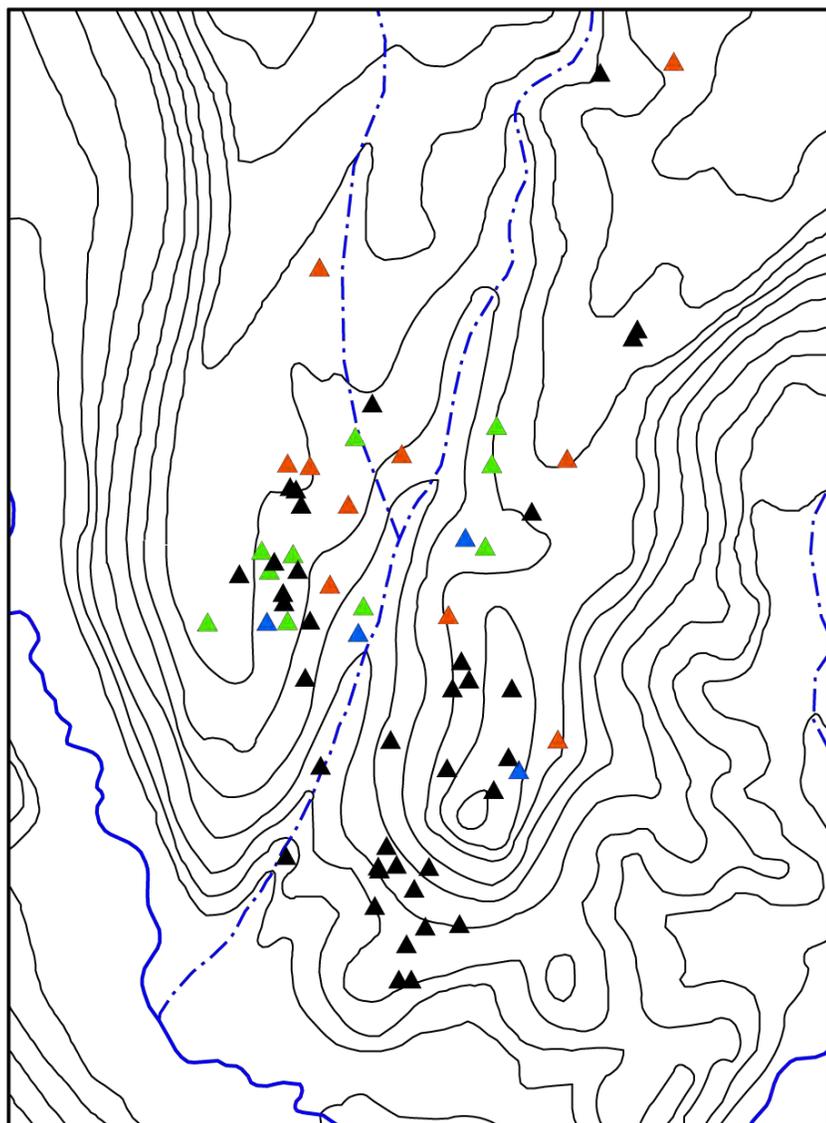
Native peoples consumed the inner bark of these trees as food or as medicine. They also removed plank-shaped slabs of wood to make cradle boards, pack saddles, and other items. Because the trees stop growing

where the bark is harvested, dendrochronological study of the resulting scars can reveal when and how frequently Indian people used this resource.

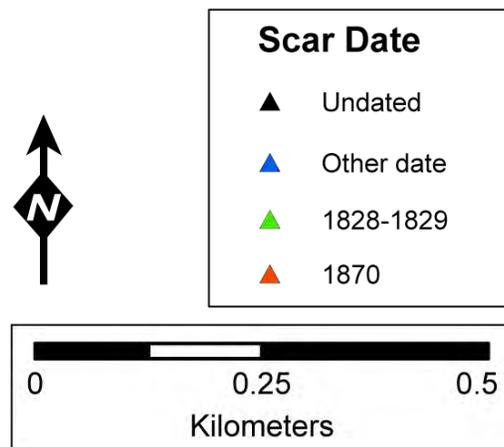
Over the course of two days the students documented 66 scars on 60 different trees (see map below), learning about archaeological field documentation methods as they measured scar widths, estimated tree heights, took photographs, and collected GPS data. The students also learned about how native peoples used the Upper Crossing area in the past as well as about the plants and animals living there today.

Following the student's survey, a group of adult volunteers spent three days collecting additional data and extracting core samples for dating. The team experimented with a new coring strategy designed to yield data on the season during which the peel took place.

Combined with 19 additional scars on 16 trees that



Upper Crossing
Culturally Modified Trees





The oldest securely dated peel was made in 1793, while the most recent post-dates 1891. However, the majority of the peels occurred during two intensive visits to the area, one in the late summer, winter, and early spring of 1828-1829 and the other in the late summer of 1870. Thus, two main usage patterns are evident. Small groups used pines in the Saguache Creek valley sporadically throughout the nineteenth century, peeling one or two trees at a time, typically in the spring. Larger groups also sporadically harvested inner bark, but they stayed longer and peeled more trees. These larger groups mainly came to the Saguache Creek valley later in the year. The clear sequence of late-season peels in 1828 and early-season peels in

1829 shows that a large group spent the winter in or near the main grove at Upper Crossing.

1829 shows that a large group spent the winter in or near the main grove at Upper Crossing.

Twenty-six of the 65 scarred trees documented in the main grove died. However, many of these likely are sufficiently well preserved to be dated. Fieldwork slated for 2012 will investigate these trees, with the aim of pushing the regional culturally modified tree record further back in time.

PCRG crews documented in 2009 and 2010, the inventory of culturally modified trees in the Upper Crossing area now stands at 76, making it one of the largest concentrations in Colorado. Sixty-five of these trees occur in a single large grove. The remainder consists mostly of isolated trees.

The 85 documented scars vary in size. The smallest are generally less than 10 cm across and 30 to 40 cm long. The largest scar measures a whopping 93 cm across and 243 cm long, nearly girdling the tree. The mean width is 34 cm and the mean length is 115 cm. On average, the trees were 209 years old when they were peeled.



Top: Overview of Upper Crossing.

Right: Alex Wesson coring a peeled tree.

Bottom: Middle school student researchers at Upper Crossing.



PCRG Member News



John Craig amidst the bonny, green, and misty hills of Scotland.

John Craig

After hurricane Irene subsided, our eager team of nine met in the Borders region in the south of Scotland for the fifth consecutive year. We excavated at John Paul Jones's cottage our first three years and last year, as in 2010, we worked at Amisfield Tower in search of evidence of occupation which would pre-date the tower completion in 1600.

Two 1 x 3 m units set out perpendicular to the tower revealed an undocumented ditch yielding hundreds of artifacts including medieval pottery sherds, broken knives, an impressive amount of animal bone and four coins. The coins have been identified and range in date collectively from 1488 to 1635.

One of the coins (shown at right), a Mary Queen of Scots, with Francis, 1558-1560, was worth three halfpence at the time. This coin was issued during Mary's very short marriage to Francis, the Dauphin of France, and has the FM logo that reflected the dual monarchy of France and Scotland from 1558-1560.

Although reaching an excavated depth of 212 cm in the test units, time constraints did not permit us to get to the bottom of the ditch nor determine whether it might have been moated and fortified, which we suspect. We are itching to return!

Sadly, Jerry McDonnell, our benefactor and the man behind the First Landing Foundation passed away late last year. When or if we return is up in the air.

Dick Krause

Despite major surgery 2011 was a fairly productive year for me. Although I could not participate in PCRG's summer programs due to replacement of my left hip, I did spend a week in Bismarck, North Dakota, in late July analyzing and describing pottery from the Flaming Arrow site. This work was incorporated in a paper titled "Dakota's Charred Body Complex: Menoken, Flaming Arrow, and 32M098B," submitted to *North Dakota Archaeology*. I also prepared and submitted another paper for publication to *North Dakota Archaeology*, entitled "The Social Import of Mound Building in North Dakota." The monograph "Toward an Archaeoethnography of Widows Creek Potting Practices," will be published by *Tennessee Valley Archaeological Research*. *The Journal of Alabama Archaeology* has accepted for publication the paper "The Import of Earthen and Stone Tumuli in North American Prehistory." I also presented two papers to the 2011 Plains Conference, namely "A Brief Study of Arikara Ceramic Change" with Kacy Hollenbeck, and "The Kinship, Tradition, and Settlement Pattern Archaeology of Middle Missouri Community Life." I was greatly honored to receive the Plains Anthropological Society's 2011 Distinguished Service Award.

Amy Koch

This year marked the completion of animal bone identifications from the Engineer Cantonment site of the Stephen H. Long Expedition (1820). The effort was collaborative with fish remains contracted to Carl R. Falk (PCRG), bird remains contracted to Thomas Labeledz (Curator of Zoological Collections at the University of Nebraska State Museum) and mammalian and herpetological specimens identified by Amy Koch. Analytic units attributed to the Cantonment occupation produced a diverse assortment (17 taxa) of domestic and wild mammals including *Blarina brevicauda* (short-tailed shrew) and *Canis*



latrans (coyote), both holotype species illustrated by Tipton Ramsay Peale while at the site (see page 9). The small herpetological sample produced six different taxa including three turtle species.

Preliminary sorting and identification of animal bone from the King site (25DW166), Dawes County, Nebraska Panhandle has begun. Investigations at the site have been conducted by Dr. Doug Bamforth and field school students from the University of Colorado-Boulder since 2006. The site contains a Woodland component and a late pre-contact component. The faunal sample is dominated by bison bone.

Craig Johnson

This has been another busy year. During the first half, final drafts of 8 of the 12 report chapters on the 1987 – 1988 salvage excavations at Jones Village (39CA3) were completed. Chapter graphics are in the outline stage. In early July a Minnesota state government shutdown due to a budget impasse between the governor and legislature left me unemployed for three weeks. I spent the time tiling our laundry and painting the exterior of my house during the worst heat wave in recent memory. When it's 85 degrees at 8:00 AM and dew point's nearly as high, you know it's going to be a long day. I reflected back on my archaeology field days, and some of those hot days during the first season at Double Ditch did not seem so bad. I also took part in a number of educational and public outreach activities with my WW II re-enactor unit (below right).

After my domestic chores were completed, the focus of my archaeological research shifted to chipped stone economies in the Middle Missouri subarea. I initially wanted to write several papers reporting on chipped stone tool raw material exploitation among a number of Plains Village sites I had collected over the past 30 years. Instead of accomplishing this on a piecemeal basis, I decided to expand it to a large number of unreported villages, requiring additional data collection. This research will also include sites from other cultural traditions (Paleoindian, Archaic, Woodland) and chipped stone flaking debris from excavations that were screened using 1/4 and 1/16 inch mesh, data which is absent from nearly all of the sites excavated in conjunction with the Interagency Archaeological Salvage Program of the 1940s, 1950s, and 1960s. The first steps in this effort began with visits to the South Dakota Archaeological Research Center (SDARC) in 2010 and the State Historical Society of North Dakota (SHSND) in 2011. Through research from the existing site and survey reports and my own personal examinations, about 100 sites have been completed with as many more to go. Additional collection forays to SDARC, SHSND, and the National Museum of Natural

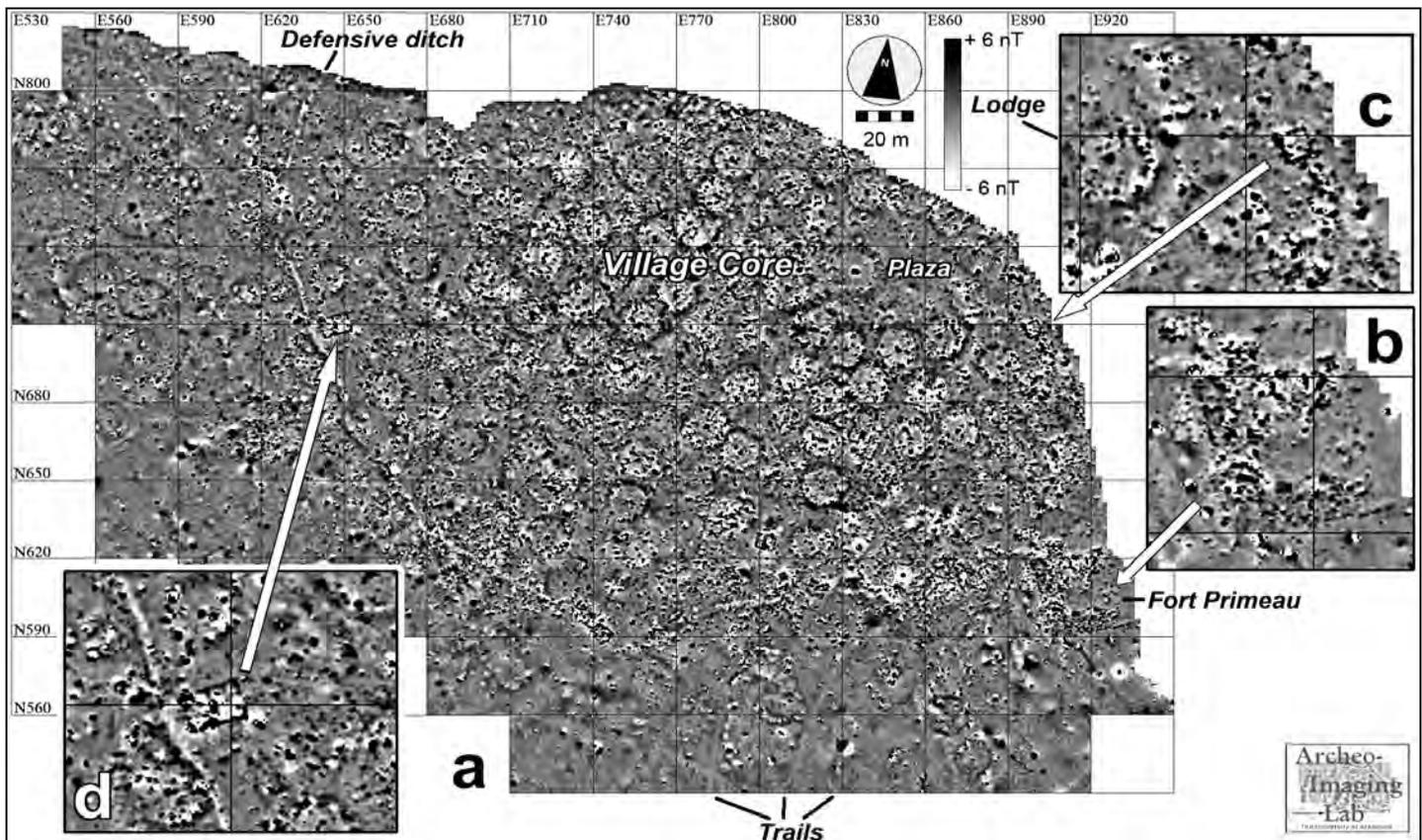


Titian Ramsay Peale. Coyote. 1819-1820. Pencil and ink. American Philosophical Society, Philadelphia.

History (NMNH) in Washington, D.C., are planned for the future. A number of sites with Archaic and Woodland components will be examined in addition to Plains Village sites with large and/or complex occupational histories such as Fire Heart Creek (32SI2), Oldham (39CH7), Black Widow (39ST3), Black Widow Ridge (39ST203), Dodd (39ST30), Sully (39SL4), Cheyenne River (39ST1), Breeden (39ST16), Bamble (39CA6), Chapelle Creek (39HU60), Potts Village (39CO19), Molstad (39DW234), Pierre School (39HU10), and Spiry-Eklo (39WW3). Preliminary results of this effort will be reported in future annual reports. The end product will be a comprehensive book on how stone tool and debitage raw materials vary through time and space, and the explanations for and theoretical underpinnings of this variability.

Craig Johnson, ready for the St. Paul Winter Carnival Parade.





Summer Activities at the Fort Clark State Historic Site

Kenneth L. Kvamme & Adam Wiewel

The Fort Clark State Historic Site (32ME2) is located a few miles southeast of Stanton, in central North Dakota. It includes a large Mandan village (occupied from 1822 to 1837 when a smallpox outbreak decimated the tribe), a later Arikara occupation of the same village space (1838-1861), two fur trading posts, Fort Clark (1830-1860) and Fort Primeau (1846-1861) (b, above), numerous trails, pony corrals, and cemeteries. In the nineteenth century Fort Clark was a significant place in the Northern Plains, visited by such notables as Prince Maximilian of Wied, artists George Catlin and Karl Bodmer, naturalist John James Audubon, and anthropologist Lewis Henry Morgan. The Archeo-Imaging Lab of the University of Arkansas conducted geophysical studies at this site in 2000-2001, focused largely on the trading posts. A single transect through the Mandan-Arikara village was also carried out that suggested great promise for future use of these methods. In July 2011, extensive and intensive geophysical investigations were completed throughout the village area by a team that included Ken and Jo Ann Kvamme and graduate students Adam Wiewel, Rebecca Wiewel, and Graham Callaway. The purpose of this project was to learn more about the extent, character, and content of this important site and to

yield data to be utilized in Adam Wiewel's Ph.D. project at the University of Arkansas.

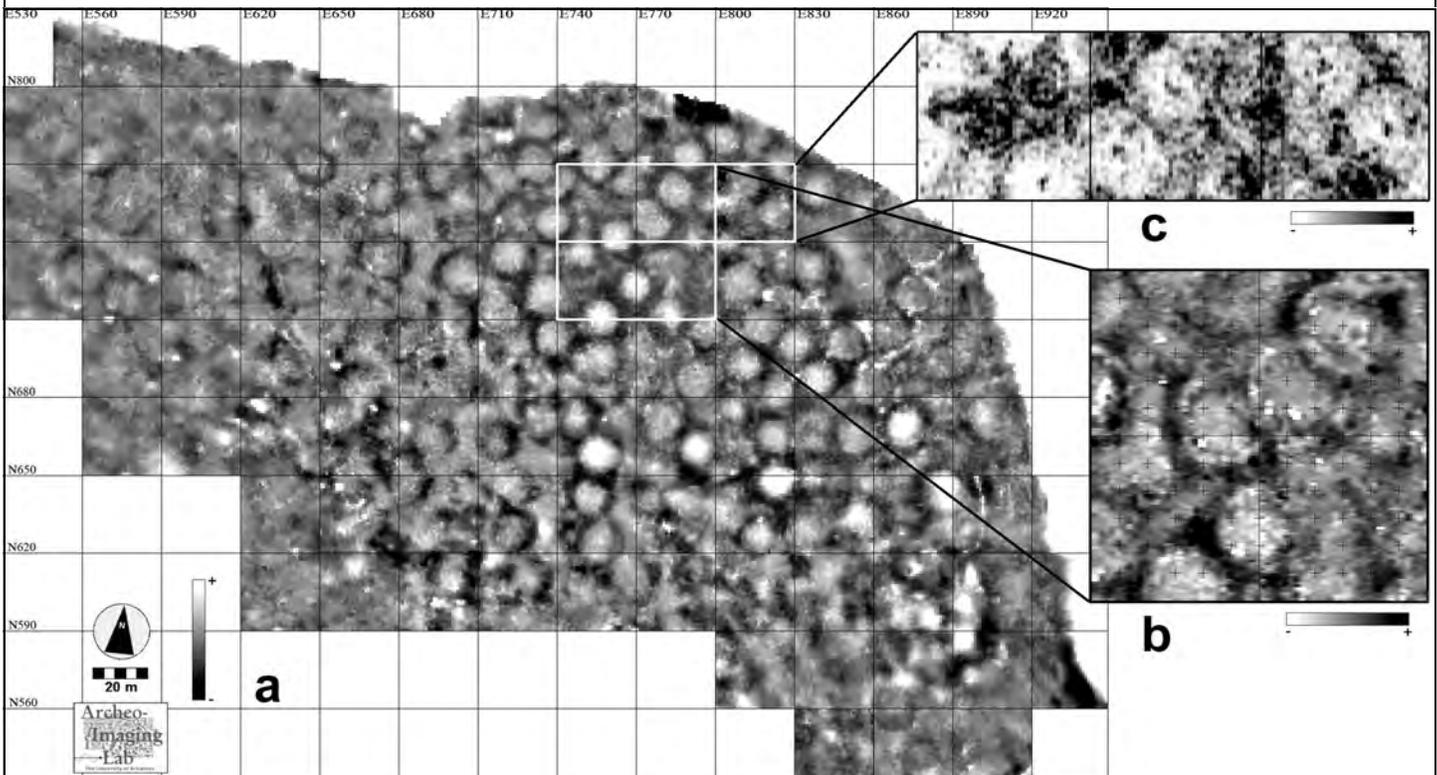
Our main focus was a magnetic gradiometry survey over the entire village space (plus an additional perimeter area) that ultimately examined 8.9 ha (a, above). Some 1.4 million magnetic measurements were acquired at a density of 16 per square meter. This wide and dense data set yielded excellent imaging of the subsurface because magnetometry responds particularly well to the archaeological record. All burned features, representing hearths or burned constructions, are strongly apparent because of enhanced thermoremanent magnetism. With settlement soils magnetically enriched by several processes, mounded soil around each lodge clearly defines their perimeters and abandoned storage pits, which eventually become filled with settlement soil, become strongly magnetic (c, above). Likewise, a relative absence of topsoil, caused by human excavations, expresses anomalies of relatively low magnetism that reveal the course of the fortification ditch, some house floors which were excavated into the sod, trails (where soil was kicked aside by foot or hoof action), and unfilled storage pits. With two nearby trading posts the village occupants had a rich source of iron artifacts, and thousands of these are revealed as well because they show strong magnetic anomalies. Cumulatively, the magnetic data offer an excellent house count, including many "hidden" and no longer visible on the surface.

Other significant findings emerged from the magnetic data as surprises. These include the definition of perhaps seven small, rectangular structures, measuring about 4 m x 6 m, dispersed through the settlement. An eye-witness sketch of the Arikara village made by William Jacob Hays in July 1860, clearly shows that some of the inhabitants at this time were building rectangular log cabin style structures similar to those used by Euroamericans, and we believe the magnetic data has relocated them (c, left). A bigger surprise was the discovery of an even larger rectangular structure measuring about 11 m x 8 m clearly partitioned into two rooms of equal area. Located at the extreme western edge of the village and too large for a common cabin, we believe that it may be the lost Fort Clark I, the original trading post established by James Kipp in 1824 which purportedly was located near the edge of the village (d, left). If this finding proves true it could answer one of the great riddles about this site.

An electrical resistivity survey was also conducted over the entire village area in order to acquire a different look at the subsurface based on its electrical properties (a, below). This survey used a twin-probe array with a 50 cm prospecting depth and a sampling interval of one meter. About 7.7 ha was covered. This survey primarily revealed the extents of former house floors by their greater resistance and by a surrounding “ring” of low resistance interpreted as eroded sediments from lodge roofs. These data provide an important adjunct to the magnetic data by giving an independent source of information on house counts, including buried hidden houses which are more clearly revealed by this data set.

Other surveys included an electromagnetic induction survey for soil conductivity (the inverse of resistivity) which was confined to only a 60 x 60 m space in the village core (b, below). This geophysical method usually responds more poorly compared to electrical resistivity and so was tried for “experimental” reasons. Yet, owing to the unusually wet conditions of 2011, this survey yielded somewhat greater detail than resistivity by better showing lodge wall locations and floor spaces. Ground-penetrating radar was also explored in a 30 x 90 m region within the village core (c, below). These data are three-dimensional in character, meaning that maps of the subsurface can be generated at a variety of depths. They reveal great detail about the former lodges of the village, clearly showing their floors and central hearths, and probable super-positioning of later Arikara houses over earlier Mandan ones.

We believe the geophysical surveys of 2011 were a great success. Over a two week period a huge volume of data was gathered that offers significant new findings about this important site to early Northern Plains history. In 2012 we hope to return to Fort Clark to extend the GPR mapping and consider generating a detailed topographic map of its many surface-visible remains. We also hope to explore the encampment spaces occupied by nomadic tribes when they came to trade which are now located on nearby private properties. The 2011 work was supported by small grants from the State Historical Society of North Dakota and the American Philosophical Society Lewis and Clark Fund for Exploration and Field Research.



Dale Henning

Despite turning 80, I am pleased to report a range of activities all through the past year and look forward to the next. A few highlights of 2011 are:

Our grand expedition for the year was last spring when we joined a Smithsonian small group tour of Portugal and Spain. Wonderful trip, topped off with three days in Barcelona on our own. The food and wine in Iberia are great! I would go back again for just one more plate of fried white anchovies. Later, we took our annual tour of the southwest, again focused on Santa Fe, then into the Rocky Mountains in Colorado. For years, I had wanted an overnight in the Stanley Hotel in Estes Park. Got it and was reminded of that old adage; "Be careful what you wish for." The restored Stanley Steamer is interesting, though. And, in pursuit of research and fun, we did a lot of touring of the Midwest, especially in Iowa to places we might have visited many times, but that continue to call us back. Who could resist Nordic Fest in Decorah, Blood Run Historic Landmark, Sioux City, Cherokee, Lake Okoboji, McGregor, LeClaire and the Mississippi River? Point of information: all these places offer great potential for archaeological research.

Research activities include participation in a symposium "Communities, Corridors, and Connections: Modeling Material Culture Markers of Cross-cultural Interaction in the Northeast and Midcontinent, 1500 to 1750" at the Midwest Archaeological Conference in LaCrosse. My paper, "Catlinite Distribution Patterns," focused on quarry exploitation and objects distributed A.D. 1350-1700. Participation in this symposium has been an invaluable and exciting learning experience for me. Most of the symposium papers will be presented at the 2012 SAA meetings in Memphis, so the fun has not ended.

I participated in another symposium "Ceramic Analyses Beyond Taxonomy: New Approaches to the Study of Plains Pottery" at the Plains Conference in Tucson. My paper, "Trials and Errors: Fifty Years with Ceramic Systematics" was anything but a new approach. Some of my past errors in taxonomic applications and their implications for misunderstandings were aired followed by suggestions for avoiding such problems in the future. Continued use of a systematic, mutually-understood and agreed-upon taxonomy for Plains ceramics that would be subjected to regular review and change was suggested. Modest applause and a few kind words followed.

Research continues on Great Oasis and Mill Creek occupations along the eastern Plains, on catlinite (and other material) tablets, Oneota interactions along with efforts for more preservation of the Blood Run National Landmark site. [For more information, see <<http://www.iowahistory.org/historic-sites/blood-run/index.html>>]. Lots to look forward to.

Carl R. Falk

In many respects 2011 mirrored the previous year. In addition to the usual responsibilities as Secretary and member of PCRG's Board of Directors, much of my time was given over to on-going projects, notably Beacon Island and Chief Looking's Village. Holmes A. Semken, Jr. (Professor Emeritus, Department of Geoscience, University of Iowa, Iowa City) and I completed a study of the non-bison component of the Beacon Island local fauna and my work with the unmodified faunal materials from PCRG's 2008 test investigation of Chief Looking's Village was completed. I hope to finish work with the modified CLV materials in early 2012. Additional efforts for PCRG consisted of continuing work with Craig Johnson on the Jones Village project. During the past summer I successfully examined all unmodified bone remains from the two-year investigation, searching for previously unrecognized bone and antler tool debris. Finally, in August I completed a preliminary study of bone remains from Mark Mitchell's 2010 test excavations at site 5SH134 in the Middle Saguache Creek area, central Colorado.

During 2011, I also worked on several additional projects, some involving PCRG members but not sponsored directly by our organization. During the late summer, working with Paul Picha, I expanded a study of faunal remains from the Beals site in northwestern Iowa through analysis of materials excavated at the site in 1971 by Patricia Williams. In the fall, coordinating with Dale R. Henning, Paul and I prepared a poster presentation ("Aspects of Late Woodland and Great Oasis Subsistence Economies: the Beals Site") for the 69th Annual Plains Conference held in Tucson, AZ. The graph on page 11 is taken from our poster presentation and summarizes data for the combined 1966 and 1971 samples.

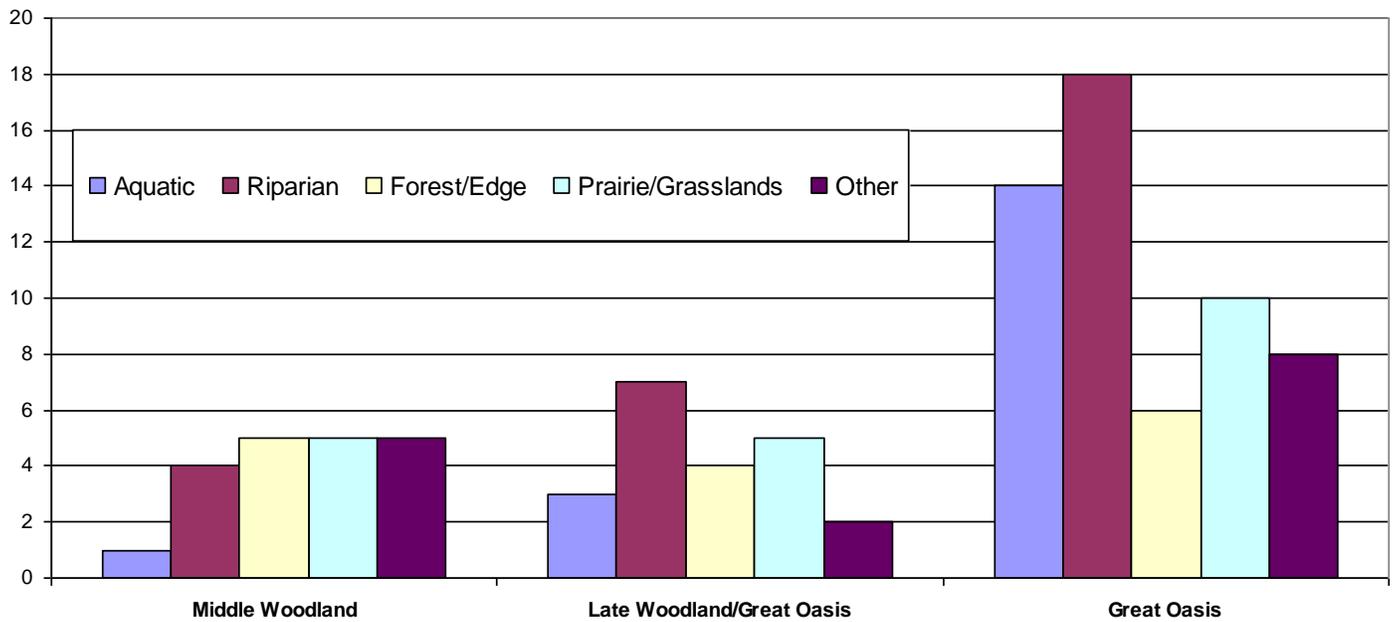
More recently I've begun working once more with Rob Bozell, Amy Koch, Bob Pepperl, Paul Picha and Tom Labeledz on animal remains from the Engineer Cantonment located near Omaha, Nebraska. Current plans call for completion of this project during 2012. This past fall, working with Alan J. Osborn (Department of Sociology/ Anthropology, University of Nebraska-Omaha and Nebraska State Museum), I began preliminary work with faunal materials from Alan's investigations at site 25SM20, a small prehistoric hamlet located on a low terrace of Oak Creek in central Nebraska.

Additional activities during the past year included collaboration with Lauren Milideo and Russell Graham (both at Penn State University, Department of Geosciences) and Holmes A. Semken, Jr. In early November, Lauren traveled to Las Vegas, Nevada to present our work in a poster session held during the 71st Annual Meeting of the Society of Vertebrate Paleontology. Using nonmetric multidimensional scaling techniques, the paper

(“Effects of Geographic Area and Sample Size on Taxonomic Overprinting”) focused on mammal remains from a series of late Holocene archaeological and paleontological sites distributed across a prairie-forest ecotone. The sample was drawn from sites in North and South Dakota, Iowa and Illinois. In part, we concluded that a

number of factors, including excavation recovery procedures, concealed environmental indicators of primary interest to paleontologists and archaeologists. Work on this project is continuing into 2012 with a planned poster presentation at the Society for American Archaeology’s April meeting in Memphis.

BEALS SITE (13CK62): Graphic representation of MNI estimates for identified vertebrate remains organized by habitat preference and cultural association.



Maxine McBrinn

Last June, my colleague, Jon Kent, and I directed a month-long Metro State College of Denver field school outside Taos in conjunction with the Taos BLM office. BLM Archaeologists Paul Williams and Merrill Dicks were incredibly helpful and supportive through the planning and field-work phases. Our students benefitted greatly from surveying with Merrill, which gave them an introduction to how archaeology is conducted by federal agencies. The field school also ran independent surveys and mapped a few historic and prehistoric sites. We found a number of sites and now have good quality maps of the site we plan to excavate this coming summer and its environs. That site is a small cave with the potential to help fill in the sparse archaeological record for the area.

Living in tents and cooking over camp stoves for a month was new for some of our students, but everyone rose to the challenge, even when dust storms knocked over tents and made cooking dinner an adventure. We finished off the season by visiting a number of iconic sites, including Bandelier, Chaco Canyon, and Mesa Verde.

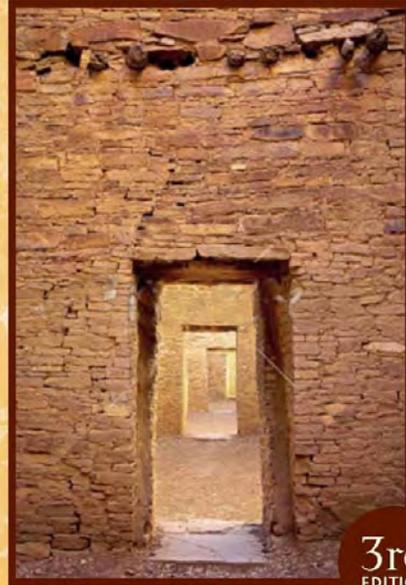
I'm also thrilled to announce that this March, Left Coast Press will publish the 3rd edition of *Archaeology of the Southwest*, written by Linda Cordell and me (right). The text and references have been completely updated and the volume includes a larger number of illustrations than in past editions. We hope that professionals and students of all kinds, including avocational archaeologists, will enjoy reading it and will find it useful. I should note that my part of the book was written at the PCRG office in Broomfield, where Mark and the PCRG Board kindly gave me working space. Having writing space away from home was a great blessing for which I am thankful!

Chris Johnston

An Note of Gratitude from a Former PCRG Work-Study Student

Many of you might not know who I am so let me take a moment to introduce myself by starting off with a sincere thank you to all of the PCRG members and supporters, and also by offering a summary of how your support of an incredible organization like PCRG has positioned me for success! My archaeology career began after a series of twists and turns following high school where I finally ended up at the University of Colorado at Boulder, thinking that being a professional archaeologist

Archaeology of the SOUTHWEST



LINDA S. CORDELL • MAXINE E. McBRINN

sounded rather interesting. I had spent a lot of my working life as a landscaper so being outside without a suit and tie was something that appealed to me, and having the chance to mix science and history only sweetened the pot! It was during my time at CU that I met Mark Mitchell and became involved with PCRG as a work-study student in the spring of 2009 sorting samples and soon after became infatuated with stone tools when I began doing basic lithic analysis under the guidance and tutelage of Stacey Bennett and Mark.

After a summer working for the Forest Service I returned to PCRG and continued as a work-study student working on various projects, including lithic analysis for Craig Johnson on the Jones Village collection and a lithic refit study on the collection from Beacon Island, until I graduated in 2010. Immediately following this I had the opportunity to join other PCRG members at the Gault site for an incredible week of excavation that was truly a memorable experience. For the remainder of 2010 and most of 2011 I continued working for PCRG, assisting

Mark on multiple field projects including our excavations at the Upper Crossing site and documenting stone circles in southern Colorado, and high altitude excavations at the Uncompahgre Cirque site and our 2011 excavation in the Flat Tops Wilderness area in northwestern Colorado. This project was particularly exciting for me as I grew up just down the road in Steamboat Springs and spent quite a bit of time hiking in the Flat Tops while growing up. I also took the skills that Mark and Stacey had taught me and used those to help work with and train other work-study students in the PCRG lab while conducting other lab tasks related to the field projects.

My time at PCRG would not have been complete without the offer and encouragement by Mark to present my first conference paper at the Plains Anthropological Conference in Bismarck in the fall of 2010. My paper was part of the Beacon Island Symposium organized by Mark and it discussed the details of the refit study we had undertaken. This was a truly nerve-racking yet highly rewarding experience and played a critical role in my development as a professional archaeologist. I have since presented two more conference papers relating to PCRG research, one at the 2011 Colorado Council of Professional Archaeologists annual meeting in La Junta, Colorado detailing updated work on the lithic assemblage from the Upper Crossing site and one at the 2011 Rocky Mountain Anthropological Conference in Missoula, Montana on a minimum analytic nodule analysis (MANA) study I had done on portions of the collection from the Uncompahgre Cirque site.

In the fall of 2011 I took the plunge into graduate school at Colorado State University where I am working with Dr. Jason LaBelle. This experience has been equally nerve-racking but has also been exponentially enriched because of the knowledge and experience I gained while working for PCRG. I have begun my thesis research and am in the process of fully defining my scope of work, but briefly defined it will be on communal bison hunting during the Late Prehistoric in northern Colorado with a specific focus on multiple bison jump sites, two of which are unrecorded. I plan to integrate comparative research on jump sites in the northern Plains, detailed lithic analysis, as well as geospatial applications

through the aid of GIS. In addition to my class load, teaching assistantship and thesis research, I have begun working for the Center for Mountain and Plains Archaeology, a non-profit organization at CSU (formally known as the Lab of Public Archaeology, or LOPA) headed up by Dr. LaBelle and supported in part by a generous grant from Jim and Audrey Benedict. The skills and experience I gained while working for PCRG have allowed me to make a smooth transition to my current position, where I have the privilege to continue to share my passion and knowledge of archaeology with interested undergraduate and graduate students and teach them what I learned just a few short years ago.

Without the generous support and enthusiastic participation of all of you, I would not be in the position I am today! I am especially indebted to Stacey for showing me the ropes of artifact analysis, and to Mark for the countless hours spent working with me on artifact analysis, for teaching me the art of being a responsible, thoughtful and thorough archaeologist and for his continued support of my academic and professional pursuits. But without your continued support, none of this would have been possible! I thank you all once again and I look forward to many more years participating in PCRG projects and having the opportunity to meet more of you!

Chris showing undergraduate students how to flint knap during a "Prehistoric Technology Demonstration" at CSU in the fall of 2011.



Kimberly Spurr

Another year, more archaeology projects! Once again I spent several weeks doing fieldwork in the bottom of the Grand Canyon, first excavating a huge prehistoric roasting feature that was being destroyed by side-canyon erosion, and later surveying and documenting sites along the North Kaibab Trail, one of the main modern routes. Sites recorded for the latter project included a 20+ room pueblo, numerous small rock art panels on talus boulders, granaries on hard-to-reach ledges, several large roasting features, a series of agricultural terraces, a CCC camp related to construction of the first cross-canyon phone line, and a historic cairn containing a mine claim that was never 'proved up' but would have given the claimants rights to most of a tributary canyon. It was a great project even though we ended up hiking out of the canyon in a foot of snow due to an early winter storm.

My other current project involves documentation of human remains excavated from prehistoric sites on the Coconino National Forest over the last century, in anticipation of repatriation and reburial. So far we have completed documentation of more than 300 burials representing the Sinagua culture, which occupied the Flagstaff region between AD 700 and 1400. These people were ancestors of the modern Hopi Tribe, who is conducting the reburials. As a bioarchaeologist I have also been recruited by the state agency that deals with inadvertent discoveries of human remains on private and state land. Last year I responded to four discovery situations in the Flagstaff area and eastern Arizona, each involving between

one and four burials. A fifth discovery call turned out to be a historic dog burial, which gained me a new skeleton for my comparative faunal bone collection.

Slipped in between the field and lab work, I attended and presented papers at the SAA conference in Sacramento and the annual Pecos Conference, this year held near the north rim of the Grand Canyon (see next page for more information).



Top: Kim with burned rock from roasting feature.

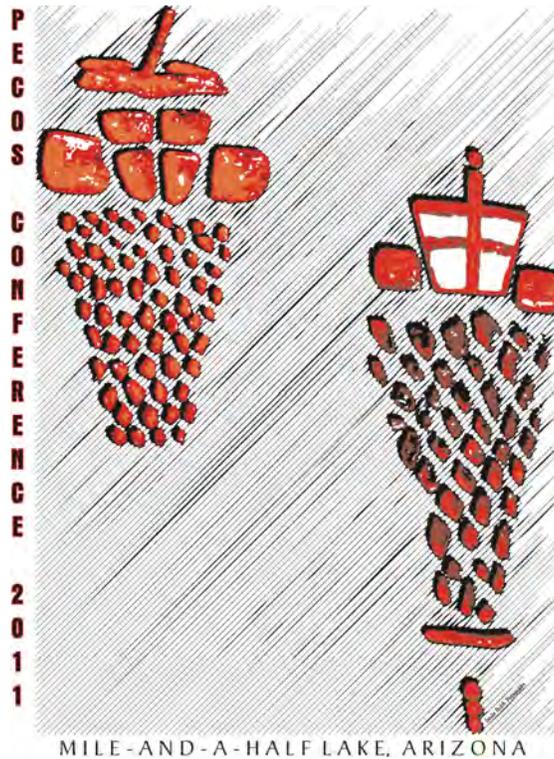
Bottom: Roasting feature after excavation.

Photos courtesy Ted Neff

David Purcell

2011 was split between paid work for Four Corners Research and volunteering as the Principal Organizer and Program Chair of the Pecos Conference. Pecos Conference is the regional (Southwestern) archaeological meeting of professional and amateur archaeologists, held annually since 1927. This year, we hosted it on the "Arizona Strip" region that is north of the Colorado River and Grand Canyon. We had 313 in attendance August 11-14, with several special sessions on regional topics, capped off with a barbeque dinner, bluegrass band, and beer from our favorite brew pub in Flagstaff. Not only have we heard from many that they thought that this was the best Pecos Conference in many years, we turned a modest profit that we donated to worthy causes, including the Archaeological Conservancy, and the Kaibab-Vermilion Cliffs Heritage Alliance, a local organization for which I was former activities co-ordinator, and which supplied abundant help in organizing.

During April and May I participated in a large WUI (Wildland Urban Interface) survey around the small northern New Mexico hispanic settlement of Canjilon,



which is between Ghost Ranch and Tierra Amarilla. The area, which is well watered, is essentially a lithic landscape, requiring a lot of effort to separate sites from the heavy background noise of debitage. A definite highlight of the project was the discovery of an Apache metal arrow head on one site that otherwise dated to the Archaic period. The project was plagued by the very windy and unsettled weather of last year, with two work sessions terminated early (and abruptly) by snow and/or rain and cold. Two mornings were 12 degrees F, which is pretty unpleasant for camping!

Two days after Pecos Conference was over, I began a series of projects, including testing at a Mogollon site in Heber,

Arizona, recording of Early Pithouse and Classic sites in the Mimbres Valley of southwestern New Mexico (including the type site for the Mimbres Three Circle Phase), and an 11,000 acre survey in part of the area in east-central Arizona burned in last summer's big forest fire, based out of the beautiful little town of Alpine (elevation 8,050 feet). During the first half of the latter project (which is ongoing now) 50 sites were recorded or re-recorded, including many Mogollon pueblos. Funny how every project I did in the second half of 2011 involved Mogollon culture archaeology, after not having set foot on a Mogollon site since 2001! In November and December the unseasonable weather returned and we again had several sessions shorted by early snowstorms. I was able to produce a draft report of the first half of the project during the winter, however.

Top: The 2011 Pecos Conference logo, based on the "Checkerboard men" pictograph panel from Snake Gulch, Arizona.

Bottom: The Three Circle pithouse site (on top of the sandstone bluff) in the Mimbres River valley, southwestern New Mexico.



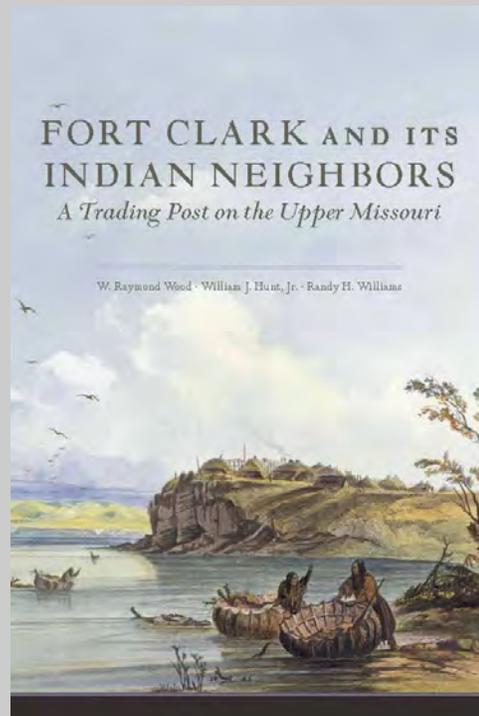
Ray Wood

The Fort Clark Interpretation Project, sponsored by the State Historical Society of North Dakota, Bismarck, completed the excavation of a blockhouse at Fort Clark State Historic Site in 2001. Stanley A. Ahler, William J. Hunt, and Kenneth Kvamme submitted technical reports on the archaeological and geophysical work at the site in 2001, 2002, and 2003. A general overview of the history and these investigations at the site under the direction of the late Stan Ahler's PCRG appeared in 2011, when the University of Oklahoma Press published *Fort Clark and its Indian Neighbors: A Trading Post on the Upper Missouri River*, by W. Raymond Wood, William J., Hunt, and Randy H. Williams. The work traces the late history of the Mandan and Arikara occupants of Mih-tutta-hang-kusch, the Indian village adjoining Fort Clark, and the story of the fort from its founding until the area was settled by Swedish and German settlers in the late 1800s. Two other projects reached completion in 2011: my biography of fur trader James Kipp was published in Volume 77 of *North Dakota History*, and the University of Utah Press released my memoirs under the title, *A White-Bearded Plainsman*.

The Plains Conference in Tucson was among the best I've ever attended despite being "somewhat" removed from the Plains, and gave me the opportunity to present a summary of the plans that Michael M. Casler and I have to publish the Upper Missouri River letter books of Forts Tecumseh, Pierre, and Union. I also participated in a geophysical session (as a raconteur) on the work done last summer at Fort Clark by a team from the University of Arkansas. Son Eric and I visited their work on a two-week-long sweep of historical and birding sites from Kansas to North Dakota. The team may have detected the location of the elusive "Fort Clark I" built there in 1825 by James Kipp for the Columbia Fur Company (see

pages 8-9).

Carolee and I also attended the 76th annual meeting of the Society for American Archaeology in Sacramento, where I was astonished to receive the Society's Lifetime Achievement Award (on April Fool's Day, appropriately enough!). I bless the many friends and colleagues that contributed to that honor, for no one works alone these days. My days of archaeological fieldwork are now long over (it's hard to believe that I retired a full decade ago!), and these days I'm fully engaged in Upper Missouri River fur-trade history and the biographies of its fur traders, currently focusing on the Garreau family.



The two illustrations are of the book cover for Fort Clark (above), and a shot of Ray Wood and Bill Hunt at Fort Clark in 2011, with Kathy Drennan (Warner) in the background (left).