DEER CREEK HILLS ARCHAEOLOGY: THE 2007 FIELD SEASON

By:
James Gary Maniery with contributions by Jennifer Moore

The Deer Creek Hills Preserve (DCHP) is located in northeastern Sacramento County 20 miles east of downtown Sacramento. Totaling nearly 4,000 acres, the preserve is managed by the Sacramento Valley Conservancy (SVC) in partnership with the County of Sacramento. The SVC’s mission is to create an open space offering visitors an opportunity to experience nature walks, equestrian rides and other natural outings (www.sacramentovalleyconservancy.org).

Our company has been privileged to provide cultural resource management services to the SVC and County of Sacramento, Department of Parks and Recreation, over the last three years. Documenting the archaeology and history of the vast open grasslands and oak woodlands that characterize the preserve has been nothing less than exceptional. The views one can see of the distant Sierra Nevada coupled with the spring flowering season displaying a sea of exuberant color has been an exhilarating and, often times, breathtaking experience.

In 1996, PAR worked on a portion of what is now the DCHP. The cultural resources survey was completed as part of a development project that never actually materialized. Thirty-nine resources classified as formal sites (i.e., those with succinct boundaries) and non-formal isolated occurrences (single non-articulated cultural phenomenon) were documented in a technical manuscript. The types of prehistoric resources described included bedrock milling stations, surface lithic (stone tool) scatters, and habitation areas. The historic landscape was indicative of ranching and pre-nineteenth century settlement, including home sites, ditches, dams and reservoirs. About 50 percent of the cultural resources were attributed to the prehistoric era, 36 percent to the historic period dating from the 1860s to present (where ranching is still an on-going enterprise) and 12 percent were characteristic of multiple historic and prehistoric features superimposed on one another.
Nine years later, our company was hired by the SVC to continue inventorying the cultural landscape of the DCHP. Although we did not revisit sites from 1996, we were asked to survey newly acquired land totaling 2,200 acres. Forty-seven new archaeological sites were located using a systematic survey approach that required a team of trained specialists walking at 20- to 40-meter or, on sensitive tributary courses, closer intervals. Global Positioning Surveying (GPS) instruments were used to precisely locate the resources that were later plotted on aerial photographs. While the cultural resources base shared similarities to the 1996 inventory, there appeared to be striking differences primarily with regard to site type, distribution and density. One of the more conspicuous differences noticed was the elaborate mining of numerous unnamed tributaries of Crevice Creek, casually characterized as Gulch Mining. Sixty-five percent of the resources were historic in nature, 29 percent prehistoric and six percent shared both prehistoric and historic features.

Our job in 2005 was to provide thumbnail descriptions of the new archaeological resources, plot them onto aerial photographs, and compose a preliminary report of our findings including recommendations on what needed to be done next. Complimenting the preliminary findings was a historical snapshot that our senior historian, Cindy Baker, prepared to provide a context for the ranching and mining periods.

Not surprising, the DCHP landscape now had an inventory base of 86 archaeological sites. The SVC, Sacramento County Parks Department, and Sacramento County Department of Environmental Review and Assessment (DERA) met at our 21st Street office in the fall of 2006 to strategize an approach to managing the cultural resources. The upshot of this meeting was as follows: (1) formally record all of the new sites to State of California standards, and have State trinomial accession numbers assigned; (2) compose a site survey report suitable for review by the appropriate reviewing agencies, and (3) schedule a meeting between the SVC, Sacramento County and the State Office of Historic Preservation to solicit input on development of a future Historic Property Treatment Plan (HPTP) for the DCHP.

Our first order of business was to embark on a systematic site recording phase. This effort began in late February 2007 and carried on over a four month period until June 20, 2007. At times, determining site boundaries of extensive mining/ditch complexes seemed somewhat tedious (especially for those of us with a biased toward the prehistoric period); however, the intact nature of and the ability to physically see the mechanics of how these systems articulated, was fascinating. In contrast to the mining and ranching landscape, the prehistoric land use of the DCHP is largely one represented by resource procurement areas marked by various arrangements of milling stations. These food processing localities showed interesting variation, not only in their size and shape, but also by their frequency over the landscape. Many ethnographic accounts that are based on late nineteenth century interviews with Maidu and Me-Wuk Indian people, suggest a multitude of food preparation uses using mortars, such as processing manzanita berries, acorns and buckeye, seeds, and even crushing meat.

As our mapping and recording progressed during the spring of 2007, it became quite clear that our initial site count would easily expand from the original count of 47. In fact, the final site total increased by 10, resulting in a grand total of 97 archaeological sites represented on the 4,000 acre preserve. Why the discrepancy? The reason is easily attributed to the widespread gulch mining and associated habitation sites, dams and water conveyance systems that suddenly emerged once field teams began systematically examining drainages and determining site boundaries. This was actually a good lesson (often a topic of discussion among archaeological field crews) because of the standard margin of error between reconnaissance level site surveys (marking and flagging sites as one goes) versus a systematic site survey whereby boundaries are repetitiously delineated in a detailed fashion. Our 2007 site-specific recording efforts at DCHP is certainly a case in point.

We are currently wrapping up a very large site record appendix; 57 records that are on average eight pages long. This paperwork represents a diligent effort on the part of our in-house technical support and administrative personnel. Our next step involves preparation of a site survey report. Optimistically, many future scientific research questions...
may one day emerge from this original data, and hence the general public may be better educated about the history and archaeology in eastern Sacramento County.

As a final footnote, I encouraged our senior environmental planner (who also possess an undergraduate degree in Anthropology from U.C. Davis) to prepare a short essay on one of the prehistoric sites that was formally recorded during our 2007 field season. Sometimes in archaeology we come across a site offering thought provoking inferences, a resource that is one-of-kind that occasionally results in a field director pushing his/her crew to move along; At DCHP this unique resource is Site 37, nicknamed our spiritual site.

Site 37 offers a sense of seclusion. It is set along an unnamed seasonal tributary of Crevice Creek between low lying grassy hillsides. Tombstone rocks decorate both sides of the drainage, offering a majestic, and a somewhat magical feeling. This archaeological site is large, comparatively speaking, measuring approximately 6,723 square meters (m²). Several milling station features, surface artifacts and evidence of habitation were mapped by our survey crew. As time passed during the recording process, an unusually flat natural rock suddenly stood out among the numerous sharp irregularly shaped tombstone rocks. Situated in the approximate center of the site, this rock was a pitted boulder petroglyph, the only one identified on the preserve thus far.

Pitted boulder petroglyphs, also known as cupule rocks (hereinafter referred to as “cupule rocks”), occur in several parts of the state of California and the World. In California, they date from the Pacific Period (2000 B.C. to 1769 A.D.). The literature places pitted boulders within the Hotchkiss Tradition, which represents cultures of the Delta region in central California. The Hotchkiss Tradition has also been described as the Late Horizon. This tradition emerged around A.D. 500 and continued to the ethnographic present. During this time, acorns and salmon were main dietary staples and people began living in large, sedentary settlements near water sources, primarily along the Sacramento and San Joaquin rivers.

Cupule rocks are defined as having several small, shallow depressions that have been chipped and ground into the rock surface. At Site 37, there are approximately 40 depressions on the horizontal face of a single rock outcrop that have an average 4 cm diameter and 1 cm depth. Work in the Diablo Range, located approximately 200 km southwest from the DCHP, resulted in the identification of 11 rock outcrops, some of which had over 200 cupules in both random and non-random patterns. At this locality, the average length of cupules was 10 cm or less with an average depth of 4 cm or less. Many of these pitted boulder petroglyph sites were found near springs or other water sources. Sierra-20 is another example of a pitted boulder petroglyph site, located in Sardinia Valley, about 15 miles north of Truckee, California. Here, similar conical pits that measured about 6 cm in diameter and from 2 to 4 cm deep were located on a small rock outcrop.

Sam Payen, a well known expert on this type of rock art, classifies pitted boulders into three different styles. He characterized Style 1 by dots that are arranged in patterns rather than scatted at random on the rock face. Pits in Style 1 are usually cup-shaped and size ranges from 0.6 to 9 cm in diameter. Boulders exhibiting Style 1 characters are usually found within large occupation sites and are often found on the edge or in the middle of a living area.

Style 2 is characterized by the use of both pits and grooves. Pits and grooves in this style can be either placed at random, in patterns or in pit-grove combinations. The pits are formed in cup or conical shapes and typically measure from 0.6 to 10 cm in diameter. Style 2 is usually found in association with occupation and milling sites.

The third style is characterized by the heavy and more elaborate use of pits and grooves that are placed at random, in series, in circles, or as a series of pit and groove connections. In Style 3, the pits and grooves appear to have been engraved into the rock and the pits are conical shaped as if...
they were drilled into the rock face. Most rock exhibiting Style 3 pits have been found in caves that may have been occupation sites with midden deposits or bedrock mortars.

According to researchers such as Payen, similar petroglyph styles have been observed in various Great Basin sites and among Pomo groups in California. Ethnographical sources for several groups in northwest California, including the Hupa, Tolowa, Karok and Shasta, have identified these rocks as “rain rocks” that may have functioned in weather-making rites. Although it is possible that cupule rocks in the Sierra were used for a similar purpose, there is no evidence presently to support this conclusion.

A second school of thought comes from ethnographic records of the Pomo, who used cupule rocks as part of fertility rites. Such rocks were deemed “baby rocks” because of the belief that they could help women conceive. E. M. Loeb, an early twentieth century ethnographer, documented the “children/baby rock” rituals of both the eastern and central Pomo. According to Payen, there are no Maidu or Miwok ethnographic recordings of the same ritual; however, it is possible that the Pomo, Maidu and Miwok shared similar cultural elements because they were all located within the Central California area. Another well known California ethnographer, R. B. Dixon, suggested that the Maidu tribe associated rocks with special fertility abilities functioning similar to that of Pomo “baby rocks.” Apparently touching the rock would induce the power to conceive.

So far we have only touched on the anthropological literature; however, we feel confident that sites of this nature offer tremendous research value despite their widespread distribution and variation in California. Many examples of pitting, or small conical depressions in rocks, are found in various ethnographic California territories such as northwestern California along the Klamath River, in the Great Basin, in the Diablo Mountain Range, in the lower Sacramento Valley and foothills, and Sierra Nevada. Often the petroglyphs co-occur with habitation sites, such as what Payen describes in his master thesis as Style 2. Although this is not always the case, the site under consideration on the DCHP would appear to fit Payen’s Style 2 classification as an occupation locale primarily because of the associated midden deposit that co-occurs with several milling stations.

In conclusion, even though it is inconclusive how pitted boulder petroglyphs functioned, their presence at Site-37 on the DCHP appears unique. On the one hand, we would be safe to postulate that Site-37 functioned as a semi-permanent occupation and/or seasonal resource procurement base, with a central pitted boulder petroglyph. On the other hand, we might also speculate that the site supported more esoteric functions related to various ceremonies that were performed well into the late nineteenth and early twentieth century by the ethnographic Maidu and Me-Wuk people living at nearby rancherias.

Bibliographic References


1 Many foothill ethnographic groups held various ritualistic dances at their village, or rancherias, in a ceremonial (above ground) roundhouse. The Kukuyu was a ceremony that dealt with the dead and with Ghosts. It was the most sacred and highly structured of Miwok ceremonies. E. W. Gifford’s manuscript on Central Miwok Ceremonies is an excellent reference on this subject. Maniery’s work at Six Mile and Murphy’s Rancherias also sheds light on ceremonies that were held at both villages as late as the early twentieth century.
Cultural Highlights in 2007

PAR's Cultural Department had a busy 2007 working on projects throughout California, Nevada and Arizona. If a year of jobs could have a theme, then our team focused on railroads. We began the year excavating a part of Folsom’s historic railroad block in preparation for a new parking structure. Exposing a portion of Perkin’s 1860s brick warehouse and documenting the structural construction details was thrilling, as was finding numerous features associated with the early railroading industry. The results of the excavation are still under preparation but already contribute to the railroad history of the town’s center. We found great satisfaction working with the City and the local railroad group (Folsom El Dorado & Sacramento Historical Railroad Association) on this high profile and exciting project.

- We followed our work in Folsom by moving west into Sacramento. Three separate projects centered on resources representing the early rail history of Sacramento and the industrial development of the railroad corridor along Front Street and R Street. The City of Sacramento is challenged with trying to upgrade and improve the R Street Corridor, Sacramento’s early industrial focus, from the river to 18th Street while still maintaining the industrial feel of the route. We are assisting the City as they meander through the Section 106 process and feel that the end design is sensitive to the history of the corridor, and maintains the rails, sidings, docks and warehouses that are defining characteristics of the corridor.

- In August 2007 we completed Historic American Engineering Record (HAER) recordation on several miles of the Los Angeles, Salt Lake, & San Pedro Railroad that crossed the desert from Southern California, through Las Vegas to Salt Lake City. As part of the same transmission line project we produced a three-fold brochure on the Hoover Dam Construction Railroad history. This brochure is available at the Hoover Dam Visitors Center, Boulder City Museum and the Southern Nevada Railroad Museum in Boulder City.

- For the last two years PAR has been conducting a Phase III Data Recovery project at a large desert camp associated with the Hoover Dam Construction effort. Dee’s Camp, located on the west side of Railroad Pass outside Boulder City, was occupied from 1932 to 1936 and again in the early 1940s. The first wave of occupation included men hired to work on the massive Hoover Dam project, as well as those who came searching for employment. The government family housing at Boulder City was scarce and many families camped in the nearby desert. The unemployed and their families also camped in the desert, forming small communities of “squatters” who scrambled to survive in the harsh desert climate. As the depression came to a close and our country geared up for war, industry boomed around Las Vegas, creating another housing crisis and sending families back out to the desert. Our work at Dees Camp documented dozens of features associated with the 1930s and 1940s squatters camps and resulted in a technical report and an interpretive three-fold brochure that is available at the Boulder City Museum and Hoover Dam Visitors Center.

- The Cultural Department has been preparing a flurry of PG&E projects recently, including evaluations and HABS/HAER documentation for elements of the Alta and Rock Creek Powerhouses (Placer County), Grizzly Dam (Plumas County), Knochs Diversion (Shasta County) and operators’ camps on the Tule River in the southern Sierra (Tulare County), California.

- PAR also began working with Capitol Station 65 for their cultural resources mitigation on the Township 9 project in Sacramento. In 2008 we should complete a HABS/HAER level II/III recordation of the 16 historic structures associated with the Bercut-Richards Cannery (including video documentation and on-film interviews with former owners/employees), traveling exhibits, and full archaeological services.
We were fortunate to land a great job up in our old stomping grounds, Del Norte County. We have been working with California State Parks, National Park Service and Far Western Anthropological Research Group at Jedediah Smith Park. Jed Smith is one of those magical places, nestled on the Smith River, backed up into redwoods, and full of interesting prehistoric and historic resources. PAR is responsible for assessing historic site potential in the park, documenting some of the sites associated with nineteenth century homesteading and mining, and researching the history of the Park.

PAR continues to assist the United States Army Reserve, 63D Regional Readiness Command with their historic property obligations under the National Historic Preservation Act. PAR is currently completing Integrated Cultural Resource Management Plans for the 63D RRC facilities in California, Nevada and Arizona and continues to provide archaeological monitoring for their efforts on Mare Island. (Cultural Highlights in 2007 continued on page 9)

Environmental Planning 2007-2008

PAR planners continue working primarily with local civil engineering companies who specialize in transportation projects throughout California. This is an area of planning that requires not only expertise and knowledge of the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), and other laws, but also requires a clear understanding (as well as some finesse) of the California Transportation Department (Caltrans) process. Many local agencies who work with Caltrans for permits and approvals when developing local and special funded projects within their jurisdictions rely on our help to guide them through the sometimes circuitous path. One of newest features of the Caltrans process involves a relatively new delegation by the Federal Highways Administration (FHWA) for compliance with the NEPA. Although the process continues to be refined, it is helping to expedite the environmental approval process.

In 2007, we completed a combined Initial Study/Environmental Assessment/Section (4) analysis for the I-580 Isabel Avenue Interchange Project in Alameda County. Mark Thomas & Company, Inc. is the engineering design consultant for a new interchange across I-580, and the City of Livermore is the local agency spearheading the new bridge and interchange. Las Positas Creek flows underneath the existing highway at this location and supports endangered species, a situation that required a long Federal Endangered Species Act, Section 7 consultation process. Other issues included a National Register of Historic Places historic property that required consultation with the State Historic Preservation Officer and also necessitated a Section 4(f) analysis as part of the environmental document. Needless to say, the environmental effort for the project extended over a long period of time, nearly 7 years. The environmental document was certified in 2007.

We are nearly finished with an Environmental Impact Report (EIR) and Programmatic Categorical Exclusion for an interchange improvement and widening of Route 68 (Holman Highway) from its junction with State Highway 1 to just past the Community Hospital of Monterey County (CHOMP). Again Mark Thomas & Company, Inc. is the consulting design engineer working for the City of Monterey and PAR was hired to prepare the environmental document and technical studies. Although working with Caltrans, District 05 in San Luis Obispo has been a smooth process, the project has extended over several years. The main environmental issue that needed to be resolved for the project was the impact to a small portion of the Monterey Pine forest. Certification of the environmental document is expected in 2008.

Currently, our company is finishing up two other very interesting projects, both of which will circulate to the public soon. The first is nearly in our backyard and involves pedestrian friendly improvements and preservation of the historic R Street industrial corridor in downtown Sacramento. The second project, again a rather lengthy and complex undertaking, is a 12-mile road widening and bridge replacement in Tulare and Fresno counties. Mark Thomas & Company, Inc. is the engineering company designing the R Street improvements for the City of Sacramento, and Quincy Engineering, Inc. is the consultant for the Avenue 416 effort in Tulare and Fresno Counties. PAR planners are also working with David Evans & Associates, Inc. on several transportation projects in Yuba, Yolo, Sacramento, and El Dorado counties. These projects have required our team to prepare preliminary environmental documents in accordance with Caltrans guidelines.
PAR has broad experience in both cultural and environmental work throughout the western United States. Over the past 25 years, we have provided both cultural and environmental services in over 70 counties in California, Nevada, Utah, Oregon, Washington and Arizona. In doing so, we have developed a deep well of research materials, as well as an understanding of issues facing local areas and the numerous agencies that oversee resources within them. PAR’s extensive experience also provides knowledge of both general historical developments and comparative resources that help eliminate costs by reducing research time.
New Employees

Jennifer Moore
Senior Environmental Planner

Marshall Millett
Associate Archaeologist

Jessica O’Connor
Administrative Assistant

PAR technical reports still available:

The Northern Pomo Archaeological Test Excavations at CA-MEN-2138, Redwood Valley, California. 
PAR Environmental Services, Inc. 
By James Gary Maniery. 
Cost $3.00

The Natoma Site, Archaeological Test Excavations at CA-SAC-166. 
PAR Environmental Services, Inc. 
By James Gary Maniery. 
Cost $6.00

A Study of the California Red-Legged Frog (Rana aurora dratonii) of Butte County, California. 
PAR Environmental Services, Inc. 
By Sean Berry 
Cost $6.75

PAR Planners were on hand at the UC Davis Job Faire on February 21, 2008.

PAR continues to support various charitable and educational causes including The First Tee of Greater Sacramento, University of Idaho Foundation and the Juvenile Diabetes Research Foundation International.

PAR acknowledges the commitment and service of the three employees who reached employment milestones: Cindy Baker, 15 years; Mary Ahern, 10 years and Monica Nolte, 5 years. Thank You!

PAR 2008 UPDATE

Editor: J.G. Maniery 
Design: George T. West

PAR Environmental Services, Inc. © 2008
PAR staff at the Scott Road Project Site.

CA-SAC-952 (The Scott Road Site) was excavated in the winter of 2007. Although preliminary in nature, the results indicated an Early Horizon (Windmiller), or possibly even older, habitation. The combination of what could be characterized as unique artifacts - uniface (keeled type), reworked obsidian (possibly a wide contracting stem form) and a milling stone feature - support an early habitation thesis. Obsidian sourcing and hydration indicate Napa Valley and Sawmill Ridge sources represented with micron readings of 4.8, 6.6 and 8.6, respectively. A copy of this preliminary testing report has been filed at the North Central Information Center, California State University, Sacramento.

PAR is a woman-owned business that originated in 1982. From its beginnings as a small firm consisting of two enterprising and dedicated archaeologists, PAR has grown into a full service organization. Our staff provides professional expertise in environmental planning and cultural resources investigations. We take great pride in producing high quality, clear and concise reports based upon thorough and objective analysis. We have acquired a well-earned reputation for completing projects on time, within budget and with meticulous attention to detail. The firm’s principals have a strong background in the natural and cultural planning issues of California.
Current Staffing:

Mary L. Maniery, CEO/Director, Cultural Resources
James Gary Maniery, CFO/Director, Environmental Planning
Cindy Baker, Senior Historian
John Dougherty, Senior Archaeologist
Rick Morris, Senior Historical Archaeologist
Monica Nolte, Associate Archaeologist
Marshall Millett, Associate Archaeologist
Jennifer Moore, Senior Planner
Mary Ahern, Office Manager
Jessica O’Connor, Administrative Assistant
George T. West, Graphic Artist

Established 1982

2007 Christmas Luncheon at Esquire Bar & Grill.

PAR ENVIRONMENTAL SERVICES, INC.
P.O. Box 160756- mailing address zip code: 95816-0756
1906 21st Street - delivery address zip code: 95811
Sacramento, California
Telephone (916) 739-8356
FAX (916) 739-0626

EMAIL: mlmaniery@aol.com (Mary L. Maniery)
jgmaniery@yahoo.com (James Gary Maniery)
ofolsomite@aol.com (Cindy Baker)
jdougherty@PARenvironmental.com (John Dougherty)
mnolte@PARenvironmental.com (Monica Nolte)
jmoore@PARenvironmental.com (Jennifer Moore)
mamillett@PARenvironmental.com (Marshall Millett)
mahern@PARenvironmental.com (Mary Ahern)
jocconnor@PARenvironmental.com (Jessica O'Connor)
gwest@PARenvironmental.com (George West)

Visit our Web Site at www.PARenvironmental.com