



PAR

ENVIRONMENTAL SERVICES, INC.



NEWSLETTER

Volume 21, Numbers 1 & 2 • 2016

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PAR ENVIRONMENTAL SERVICES, INC.'s mission is to provide technical reports on time, within budget, and with meticulous attention to detail.

THE ARCHAEOLOGY OF THE WENDEL SITE: A LATE HOLOCENE HUNTER-GATHERER SITE ON THE EDGE OF HONEY LAKE – NORTHEASTERN CALIFORNIA

by Andrea "Ellie" Maniery

PAR's Cultural Resources Management Department is privileged to work in various regions throughout California. In 2015, our team, with assistance from seasonally hired archaeologists and visiting Native Americans, carried out an investigation at a prehistoric hunting and gathering camp along the shores of Honey Lake in Northeastern California. After two weeks of excavation, months of laboratory analysis, and review of comparative literature for this region of California, we are able to piece together how prehistoric inhabitants used marsh land on the edges of Honey Lake intermittently throughout much of the late Holocene.

California archaeologists are faced with many challenges when attempting to reconstruct a fragmented prehistory, at sites that are often disturbed. We also face challenges to determine the importance of sites under environmental legislation – why they need to be avoided or studied when they fall within a project area.

Recently, PAR was called on to carry out the archaeological study meant to satisfy the California Environmental Quality Act (CEQA) near Wendel.

PAR is pleased to present the summary of research and results of the Phase III data recovery project at the Wendel Site (CALAS-1756/H) in Lassen County, California. It is situated in the Susan River Delta just north of Honey Lake, and is of particular interest for the archaeological field due to its location in-between the Great Basin and the Sierra Nevada. Both of these regions have distinct prehistoric cultural traits, and the ways in which the two regions in-



View of mountains from the Wendel Site

fluence the patterns observed at the site have the potential to yield research questions and data about sites within this transition zone.

The east side of the Wendel Site was excavated in 1995 by Far Western Anthropological Research Group, a private corporation located in Davis, California. Far Western's excavations in 1995 revealed five features, all likely house floors, delineated by dish-shaped concentrations of charcoal staining in backhoe trench side walls. Far Western conducted a variety of special studies including radiocarbon dating, X-Ray Fluorescence (XRF), obsidian hydration (OH), and flotation. These studies allowed researchers to answer questions about the age and origin of obsidian artifacts, the age of organic matter (typically carbon), as well as the kinds of plant life people were consuming on site. The results of their excavations constituted approximately 10,000 fragments of cultural material including pieces of bone, debitage, ground stone, and formal tools (projectile points, bifaces, flake tools, and a shell bead).

In order to keep data comparable between the east and west sides of the site and between the span of 20 years, PAR's fieldwork strategy on the west side of the site mirrored Far Western's east side work. This resulted in the recordation of a

midden feature, where people were actively disposing of their food waste on site, creating dark stained earth with high concentrations of bone, organic matter, and fragmented artifacts. The site also contained approximately 1,400 fragments of cultural material similar to Far Western's: projectile points, ground stone, debitage, bone fragments, and even some historical artifacts from ranching at the site. PAR set out to add information to research topics proposed by Far Western in their original research design: chronology; subsistence and settlement change; and mobility and land use. The results of these questions are summarized below.

Site Chronology

Synthesized chronometric data from the western half of the Wendel Site suggests a repeated occupation (and a great deal of stratigraphic disturbance). The radiocarbon dates place midden samples between 700 and 300 calibrated years before present (cal B.P.) (Table 1), but adding obsidian hydration data and projectile point types indicate people actively used the Wendel Site for a long period of time – perhaps thousands of years. If observing the averages of the obsidian hydration results for these sources, the western half of the Wendel Site falls firmly in the Middle Archaic period for this region, or between

3500-1300 cal B.P. However, when the wide ranges of means are considered for each obsidian source, it seems more likely that the site has undergone great disturbance. These ranges are not unusual, and similar data were recovered from Far Western's portion of the Wendel Site. The obsidian hydration, as well as the fragmented nature of the lithic assemblage, suggests the site was both reused by prehistoric populations across time and repeatedly disturbed during over the last century of agricultural and ranching operations. This resulted in sample mixing across the entire western site area.

While some of the projectile points may in fact be heirloom items, most of the tools are made expediently and illustrate frequent resharpening. Older tools may have been scavenged by more recent groups and reused over time, representing a younger age of the overall site. Dominance of Rosegate projectile points and the Middle Archaic obsidian hydration results suggest an occupation on par with Far Western's findings of a Middle/Late Archaic population.

The main exception to this finding is the midden area on the western side of the site. Radiocarbon dating places use of this area firmly within the Terminal Prehistoric (or within the last 600 years). If the radiocar-

Table 1. 2015 Radiocarbon Results from CA-LAS-1756/H

Lab code	Context	Material	rcy bp	Cal BP ¹	Median Cal BP	Cal AD/BC	Sigma σ
EZV-00231	N27 E12 38 cmbd	Charcoal	325 ± 30	306-469	389	AD 1481-1644	2
EZV-00232	N27 E12 44-54 cmbd	Charcoal	790 ± 25	675-738	707	AD 1212-1275	2
EZV-00233	S18 W21 30-40 cmbd	Charcoal	425 ± 25	459-521	498	AD 1429-1491	2

¹¹⁴C dates calibrated at 2 σ with CALIB 7.1 (Stuiver and Reimer 1993) using the Intcal13 Calibration curve (Reimer et al. 2013)

bon dates are indicative of cultural use and are not a result of naturally occurring charcoal from brush or wild fires, then this midden, as well as the radiocarbon sample in Excavation Unit S18 W21, represents more recent use of the site. This may explain some of the intensification seen in the fragmented faunal collection and resharpening of artifacts, as intensification is often associated with late period sites.

such as the single specimen cataloged from the Wendel Site are not common in the area; although Riddell did recover a similarly formed piece from the Karlo Site (located north in the next valley from the Wendel Site), which he compared to unusual artifacts from the Deetz Site in Oregon. He did not provide any details concerning the possible purpose for these artifacts. It can only be hypothesized that they represent a personal adornment or perhaps have heirloom, ceremonial, or an unknown utilitarian use. More of these artifacts discovered in context with other artifacts or in established features may elucidate this question.

Subsistence and Settlement Change

In the last 2000 years of history in this area, the rate of cultural changes in subsistence and settlement seems to accelerate. Technology, resource utilization of both toolstone and food, and changes in settlement are all observed at this time around the Great Basin and in California. Small mammals, root crops, and seed crops (such as pinyon pine and acorns in California) increase in frequency of use, and major settlement changes also occur. At the same time, radiocarbon dates recovered from Secret Valley (about 15 miles north) drop in frequency between 1000 and 500 BP, implying droughting. Three likely connected causes explain these phenomena: 1) environmental change such as drought in the last 2000 years; 2) resource intensification as a result of population or even resource imbalances; and 3) social conflict, presumably interpersonal violence. Increase in the usage of high-processing-time plants such as seed crops and an increase in expedient tools over formal tools



Semi-circular obsidian artifact from CA-LAS-1756/H

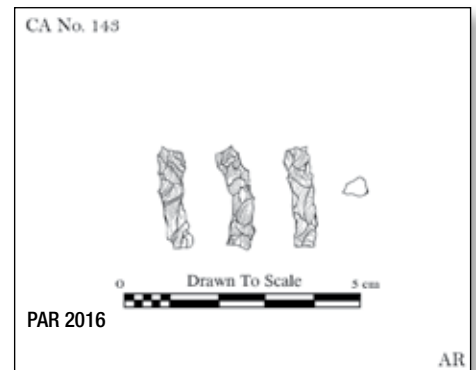


Illustration of Gatecliff projectile point

Illustration of semi-circular obsidian artifact

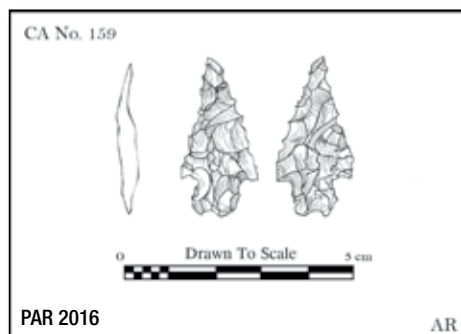
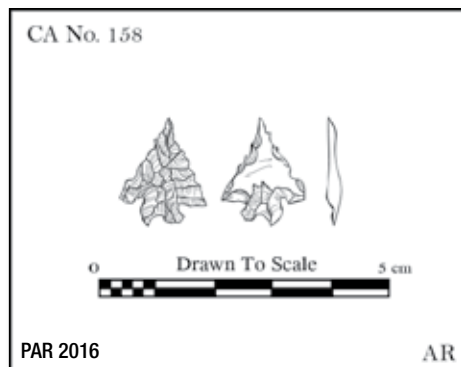


Illustration of small projectile point



PAR conducted a comparison of nearby collections using work from a variety of researchers and ethnographers, including Francis Riddell, an archaeologist and ethnographer who actively published about California Native Americans from the 1950s through the 1990s. The comparative study serves the purpose of expanding our understanding of these items at the Wendel Site, including how they were used by prehistoric peoples. First, crescentic flaked stone pieces

are just two of the signatures for resource intensification found in a site's assemblage.

The greatest indication of subsistence change in the Late Archaic/Terminal Prehistoric at the Wendel Site is inferred from the highly fragmented faunal and lithic assemblage concurrent with the presence of many ground stone artifacts. This pattern implies resource intensification and subsistence-settlement change as resources (or access to resources) became scarce. The intense use of this site during times of drought in the Sierra Nevada and around the Great Basin could imply that people were coming to the Wendel Site for the reliable marshland resources in times of climatic struggle from the surrounding region. Wetland resources and both big and small game were all used intensively. Seed crops and small game, although present in the

assemblage, do not prevail over any other resource.

Mobility and Land Use

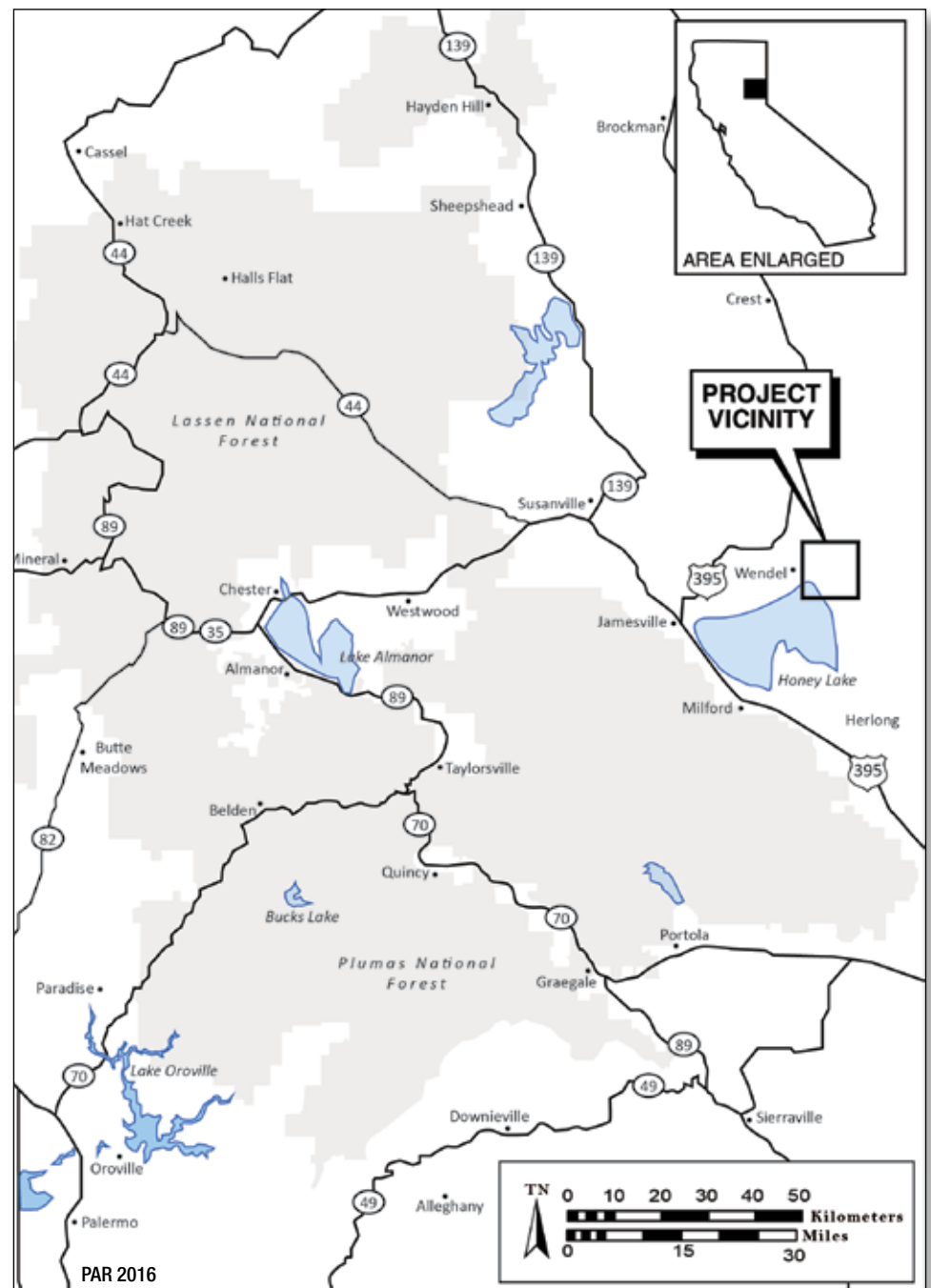
In order to identify prehistoric hunter-gatherer movements across the Honey Lake basin, XRF and OH studies are used to trace the origins and movements of obsidian artifacts. OH aids in the understanding of when certain sources were actively used as a toolstone and tracks when the occurrence of changes in preferred obsidians took place. Far Western's XRF results indicate The Wendel Site contained mostly three sources dating to Middle/Late Archaic occupation, with toolstone diversity changing in each major era. Expanded variation in toolstone sources indicates a highly mobile population of people, while fewer represented sources imply less movement across the landscape. The more mobile groups tend to travel light – making use of maintainable tools such as bifaces that are all morphologically similar. This pattern suggests that highly mobile groups have less diversity of tool types and greater diversity of toolstone.

The most common obsidian sources used during the Terminal Prehistoric period at CA-LAS-1756/H are Bordwell Spring, Buffalo Hills, and the South Warners. These sources suggest a minimum travel distance of 80 km to over 100 km for the gathering of obsidian. This distance may have been incorporated into subsistence and mobility rounds, or (if that distance was too great to include in subsistence rounds), may in part account for the extreme reuse of small flakes into expedient flaked tools seen in the lithic collection at the site, perhaps at periods in time when trade networks were unfavorable. Two basalt artifacts came from sources at the Yana Volcanic Center (about 80 km away)

and Gold Lake (about 60 km away). Despite the smaller sample size in the 2015 XRF studies, the percentages of each source compared to the overall assemblage were close to those reported by Far Western. However, when viewed on a source by source basis, the percentage of Fox Mountain obsidian in the 2015 assemblage also increased from 2% in 1995 to 16% of the assemblage in 2015. These data imply that a somewhat different pattern

of raw-material use took place on the western side of the Wendel Site excavated in 2015.

When compared to the subsistence patterns from the site, most of which are concentrated near the perimeters of the Honey Lake Basin (50 km or less away in any one direction), obsidian exchange likely occurred to some extent, transporting the distant sources (located between 60-100 km away) identified by XRF onto the site. As an alter-



native explanation, the raw materials may have been part of a larger round of resource gathering, while foraging took place closer to the Wendel Site by different occupants of the camp/village. Foraging at the site may have occurred at different times of the year if the resource round was seasonally based.

The results suggest that populations occupying Wendel primarily used wetland resources, possibly those found in the Susan River Delta just west of the site, on the north side of Honey Lake. Sites like this one on the edges of lake marshes were attractive residential bases for prehistoric populations and are noted in the archaeological record throughout the Great Basin in locations such as Surprise Valley about 80 miles north. Wetland environments provided some relief from drought conditions, as well as access to a broad range of plant and waterfowl resources.

CONCLUSIONS

The Wendel Site occupational period ranges between 3500 and 300 cal BP, with the earliest habitation of the site evidenced through OH data. The most concentrated use of the site appears to be between 700 and 300 cal BP, when the midden was actively being created. Unmodified bones and debitage found in this context were highly fragmented, suggesting resource intensification during the Late Archaic and Terminal Prehistoric periods. This fragmentation prevents some of the fine-grained resolution of the assemblage, as the faunal collection was not identifiable to species level in most cases. Use of the western side of the site by historical agriculture practices may also account for some of this disturbance, as well as the overall average size of the faunal and debitage collections. A switch in subsistence practices in the Late

Holocene does not seem to have occurred in a highly visible way.

Due to the XRF analysis revealing two sources not in Far Western's 1995 data, and the prevalence of Fox Mountain obsidian, it seems possible that the western side of the Wendel Site may have been populated by a different group later in time than the Far Western excavated eastern side. This is further supported by the lack of discrete features discovered by the PAR excavations, and the younger radiocarbon dates on the midden sediments. At the very least, PAR's findings express different trade networks or other social factors than on the eastern side of the site. Alternative to trade, obsidian entering the site as smaller nodules and only minimally altered along the route possibly suggests a high level of seasonal mobility, perhaps with a summer use of the Wendel Site as evidenced by the summer ripening seeds uncovered in the flotation studies.

The life of the Wendel Site was as dynamic as the people that lived there, and likely underwent different episodes and intensity of use as the centuries progressed. It transitioned from the houses and permanent features of the eastern half to the light use and more expedient nature of cultural remains uncovered during PAR's excavations of the west side. Finally, the site history culminated in the eventual disturbance from agriculture by historic settlers, as did much of the Honey Lake Basin. ✂

For a full list of the references used in this snapshot of our work at the Wendel Site, please contact Ms. Maniery directly at aemaniery@parenvironmental.com.

Editor's Corner

by Andrea "Ellie" Maniery

This year I have taken on the formidable task of editing the company newsletter. Throughout this version you may notice a few subtle changes, such as the "PAR in the Community" and the "Research Corner" sections. I added these for my first edition of the newsletter to highlight values that both myself and the company hold in high regard: The public's education in cultural resource management as well as contributing relevant research to the archaeological and historical record. We also continue to be a trusted source of environmental planning for transportation and bridge replacement projects throughout Sacramento and Nevada counties. This year, PAR employees have been involved in multiple projects benefitting the public, and our cultural projects have yielded a wealth of data, some of which we presented at the Society for California Archaeology annual meeting in Ontario, where our president Mary Maniery was a plenary session speaker. In the future, we hope to pursue these values with integrity and above all, exemplify true stewardship of archaeological resources. We are very proud of our employees and our work, and I hope you enjoy reading the highlights of PAR's 2016 year. We look forward to working with you in 2017! ✂



Editor, working within a historic concentration in Stanislaus National Forest

CULTURAL RESOURCES DEPARTMENT *by Mary L. Maniery*

➤ PAR staff completed Integrated Cultural Resource Management Plans for United States Army Reserve 63d Regional Readiness Support facilities in seven states: California, Nevada, Arizona, New Mexico, Texas, Oklahoma, and Arkansas. The ICRMPs will guide USAR activities and management practices until 2021.

➤ PAR's Senior Historian, Cindy Baker, worked with Pacific Gas and Electric Company and the Mohave River Valley Museum to prepare two popular articles for dissemination to the public. A flyer and link to the articles is provided in the "PAR in the Community" section of this newsletter.

➤ PAR returned to the high country in the Sierra Nevada, to evaluate several work camps associated with dam construction. Faucherie Lake and Jackson Meadows Reservoir are part of the Nevada Irrigation District resources and PAR teamed with HDR Inc. to conduct metal detection, test

excavations, and National Register evaluations of the several sites. The dam at Faucherie Lake was built around 1860 and replaced in 1963 by crews who stayed near the dam site. The two historical sites studied by PAR relate to the dam construction efforts, as well as to recreational use of the lake in the 1930s and 1940s. The site at Jackson Meadows is a prehistoric seasonal camp. John Dougherty, PAR's Senior Archaeologist, served as a lithic analyst for the work at Jackson Meadows.

➤ PAR has been fortunate to continue working on interesting projects while assisting PG&E with compliance. In 2015 and 2016 we have tested prehistoric resources in Humboldt, Yuba, and Plumas counties; evaluated a company residential camp on the Feather River; surveyed several transmission lines, recorded and evaluated hydroelectric features on the DeSabra-Centerville system; and studied several dams, buildings, canals, and resources. PAR evalu-

ated five historical sites associated with the Spring Gap-Stanislaus Hydroelectric System, including two construction camps; the site of a tram hoist house; a railroad used to transport equipment and supplies for the construction effort; and a road associated with dam construction.

➤ The company continues to assist the County of Sacramento Environmental Review and Assessment/environmental planning staff on various transportation and bridge replacement projects. Our environmental planning department is also involved with projects within the American River Parkway. We have provided archaeological monitoring with Native American participation at the Cordova Creek naturalization project and Extended Phase I investigations at the Chase Drive extension. PAR is currently writing up work of a discreet refuse deposit associated with Japanese laborers in the 1910s through the 1920s from the Cordova Creek project. ✂

ENVIRONMENTAL PLANNING DEPARTMENT *by James Gary Maniery*

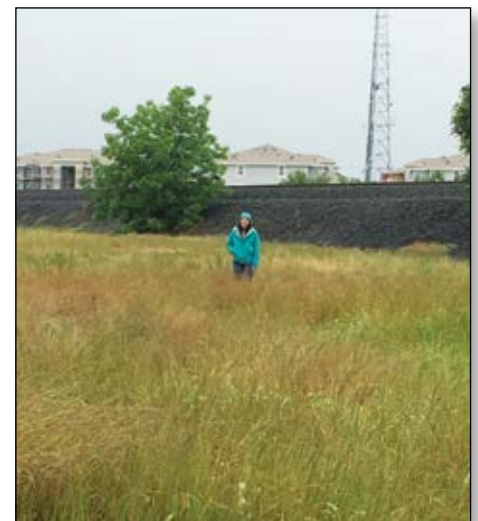
Environmental Planning - Transportation

Following environmental certification of an EIR/EA in 2012 prepared by J. G. Maniery and several other contributors, Mark Thomas and Company (MTCO) entered into a contract with our firm to assist with the Ramona Avenue widening project. As MTCO enters the final design phase/checkpoint, environmental permitting and a revalidation was required by Caltrans and by the conditions of the certified environmental document. ✂

Caltrans Environmental Processes - When does an Environmental Revalidation Apply

By Laura Zajac and J.G. Maniery

Caltrans requires a variety of environmental documentation when planning a transportation project, such as Environmental Impact Reports (EIR), Environmental Impact Statements (EIS), Environmental Assessments (EA), Initial Studies, and Categorical Exclusions. However, there are some lesser known documents that may be needed during the environmental process. This article



Wetlands at the Ramona Avenue
Widening Project, 2016

discusses the Revalidation process and when it applies.

As a Caltrans transportation project proceeds from the environmental review phase toward construction there may be circumstances that require the projects validity to be re-examined. Three triggers can lead to this reexamination process, which is known as revalidation:

1. The project is proceeding to the next major federal approval;
2. There are changes to the project; or
3. Three years have passed since the EIS/EIR has been signed.

If any of the above triggers occur during a project, then a NEPA/CEQA Revalidation Form is required. Caltrans uses this form to determine if the original environmental document is still valid; additional documentation is needed or whether a new document is required. Once approved by the State, the form is included with the project files maintained by the Caltrans district.

The term “reevaluation” historically has been used when refer-

ring to the process of reexamining a project and its documentation. In the past, the term’s mixed uses have led to several misunderstandings about the types of NEPA documents that need to be reassessed. To decrease confusion the revalidation form was developed and has since provided consistency for the reevaluation and consultation process.

Revalidations are not required under NEPA law; however, they are required by the Federal Highway Administration (FHWA). The Caltrans District Environmental Branch Chief, in collaboration with the Project Manager, is responsible for determining that reevaluation is completed in accordance with the FHWA. Public circulation is not required for the documented results or written evaluations.

In May 2016, PAR Environmental Services, Inc. (PAR) began work on a revalidation for the Folsom Boulevard Widening/Ramona Avenue Extension Project in the City of Sacramento. PAR finalized an Environmental Impact Report for this project in July 2012. Because

the project is proceeding to the next major federal approval (one of the revalidation triggers) a revalidation form was necessary. In the Ramona revalidation form, we discussed changes to special status species listed in the California Natural Diversity Database (CNDDDB). Among the species was the purple martin, a North American swallow; however, based on input from Dr. Edward “Ted” Beedy, this bird was not present within the limits of the project and the conclusions in the 2011 Natural Environment Study remained valid. The form was approved by Caltrans on June 23, 2016.

For more information on the revalidation process visit the Caltrans environmental handbook at: <http://www.dot.ca.gov/ser/vol1/sec4/ch33reeval/chap33reeval.htm>

PAR has worked continuously on Caltrans projects throughout California since 1985. If you need any support on transportation projects PAR’s environmental team has the experience and expertise to assist you. ✂



J.G. Maniery at Cordova Creek Naturalization Project within the American River Parkway

PAR IN THE COMMUNITY

California Auto Museum Summer Camp

By Ellie Maniery

This summer, PAR collaborated with the California Automobile Museum (CAM) for their summer kids camp. PAR employees led summer camp participants in a mock archaeological excavation of three transportation-themed units. Concepts of archaeological excavation, context, and artifact interpretation were incorporated into camp activities. PAR participated in mock excavations during two camp sessions.

The camp began with PAR archaeologists Ellie Maniery and Sarah Heffner, along with CAM Education Coordinator Jesse Kilburn, predig-

ging three 50 cm X 50 cm units and seeding them with items from teaching collections provided by both PAR and CAM. Each unit followed a theme: an auto garage; travel tourism; and a family on a road trip in a Model A. These themes were created by the museum and PAR archaeologists to highlight the importance of context to archaeology – how artifacts contribute to the overall reconstruction of the past within a place. When the kids (ages 8-12) arrived for camp that morning, PAR president Mary Maniery gave a presentation on archaeology and explained what archaeologists do. She touched upon concepts of preservation, context, and the formation of the archaeological record over

time. After her talk, campers were divided into small groups and led to the units, where they were aided by Ellie and Sarah in stratigraphic excavation using the tools of the trade, screening the contents, and recording their findings. The exercise ended with the campers bringing their artifacts inside and researching them to reconstruct what each of their units meant and what they represented about the past. PAR archaeologists led each group in discussion of their findings in front of the rest of the camp. Every group figured out their theme! PAR was happy to provide the tools, time, and personnel for the camp and hopes to continue similar public archaeology programs in the future. ✨



Discussing results



Helping campers measure depth



Researching inside



Helping camper screen

Preserving Italian History

By Cindy Baker

PAR Senior Historian Cindy Baker is active in two aspects of preserving Italian history in Northern California. She is President and Programming Director for the Giuseppe Murer House, an historic home in Folsom. This all-volunteer non-profit is responsible for the maintenance and operation of the site, which includes a learning center, bocce court and caretaker's cottage, in addition to the historic home, workshop and garage/museum. Funds are raised through Italian cooking and

language classes, art workshops, special events and bocce tournaments. More information and photos are available on Facebook at Murer House Learning Center and through their website www.murerhouse.org.

Cindy has also been busy the past three years helping an Italian author, Michele Cecchini, conduct research on a historical fiction novel he was writing on an Italian protagonist living in California in the 1930s. A resident of Livorno, Michele asked Cindy to help him find in-depth background on the lives and haunts of Italians living

in San Francisco during this period. His book, "Per il bene che ti voglio", was published in Italian in 2015. Cindy met Michele on his North American book tour last year. ✨



Cindy and Michele at his book tour

Announcing Two New Online Articles on Daggett

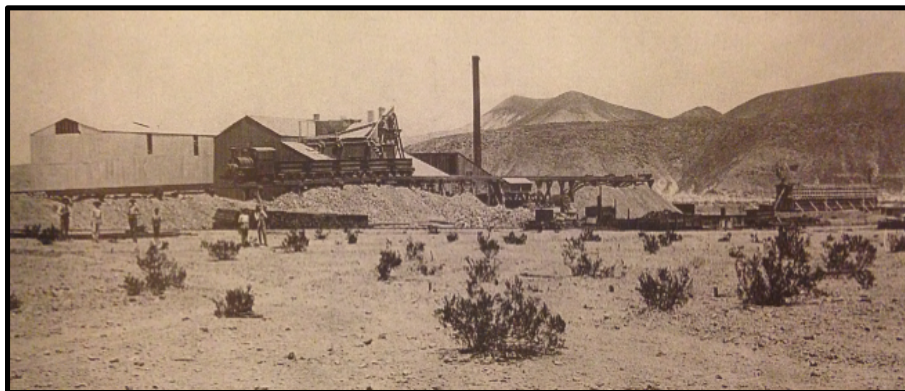
In 2015, PAR Environmental Services prepared two articles on the history of Daggett and its mining past. Both are now available online through the Mojave River Historical Society's website at <http://mojaverivervalleymuseum.org/>

Of Mines and Mules: A History of Daggett



The quiet, unassuming town of Daggett, California, nestled in the desert south of the Calico Mountains near Barstow, has a big history to tell. From silver rushes to borate refining, Daggett's economy depended on mining. While historians disagree about when the former boom town was first settled, its real beginning came in 1882. For decades, the cluster of buildings with cottonwood trees would be a sight for the sore eyes of travelers crossing the inhospitable desert.

All that Remains: Daggett's Borate Archaeology



During its heyday, Daggett boasted an active borate mining industry unsurpassed in the Mojave Desert. Visitors today can still find evidence of Daggett's mining past. Archaeologists have recently conducted studies of the large mill site of the American Borax Company, recording what remains. More than 130 years later, information is still coming to light on this important period in southern California's heritage.

PAR ENVIRONMENTAL SERVICES, INC., 1906 21ST ST., SACRAMENTO, CALIFORNIA

RESEARCH CORNER

Campfire Story

By Mallory Triplett

Millennia of glacial history created the lake that travelers, and many summer Boy Scout campers know today as Lake Sterling. Originally dammed in the 1858, this reservoir was used to increase the storage capacity for mining ventures that were taking place in Nevada City. By the 1860s and 1870s the water from the lake was used to supply the small settlement of Mendoza, once located at Fordyce Lake (a half-mile away from the Enterprise Mine and Stamp Mill), with water. Now, after many upgrades and a change in the economic environment from mining to power generation, this lake sits quietly while campers and hikers come to fish and enjoy the pristine environment created by the dammed reservoir.

In Fall 2015, three PAR archaeologists had the chance to survey the

recently exposed lakeshore, check on the condition of the Boy Scouts of America's Camp Cole, and record several new isolated artifacts that had not been seen in many years. The goal was to see what the landscape around the shore of Lake Sterling might have looked like and who would have been using it before the original log dam was constructed. Bottle fragments and recreational debris spanning the last century were the most common artifacts. Overall, there were not a lot of artifacts or features relocated that could tell us much about the activities that took place before the construction of the dam, other than a campfire ring located below the waterline. Although it was impossible to tell when that campfire ring was last used due to the lack of artifacts, it was a satisfying and intriguing feature to find. It might have been 20 years old or it could have come from before the dam

was built in 1858. Carbon dating is not usually in the budget for surveys so we won't get the chance to know the campfire ring's possible date of existence, but that's alright. Sometimes half the excitement in our job means imagining the way it might have been without actually knowing the hard evidence. The possibility of commiserating with an individual who made camp 150 years ago on the other side of the lake from where we did is a one-of-a-kind experience and, at least in this instance, one that will luckily not be disturbed by the carbon dates of the charcoal remains on the underside of a rock. A part of our work is to experience the past in ways that leave a little bit of room to imagine people throughout history looking out across the same lake and up at the same sky as us and it is an experience we try not to take for granted when we get the chance. ✂



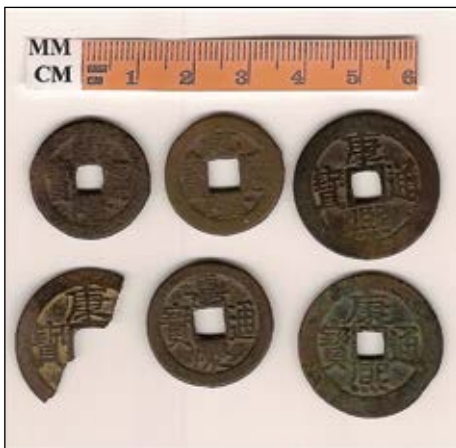
Sterling Lake

RESEARCH CORNER

Finding Hidden Voices

By Sarah Heffner

In April 2016, the Society for Historical Archaeology published “Finding Hidden Voices of the Chinese Railroad Workers: An Archaeological and Historical Journey”, a collaborative effort with the Chinese Historical Society of America, the Chinese Railroad Workers in North American Project at Stanford University, PAR Environmental Services, Inc., and Environmental Science Associates. Authors Mary Maniery, Rebecca Allen, and Sarah Heffner joined forces with archaeologists, historians, graphic artists, and railroad worker descendants to trace the journey of Chinese railroad workers from southern China to the western United States during the nineteenth century. This is a visually stunning volume that uses artifacts, drawings, and historic photographs to explore the material lives of often-unnamed workers. This book celebrates the massive achievements of the Chinese railroad workers and the sacrifices they made while helping to connect Americans through an extensive



Brass and zinc coins from Northern Pacific Railroad camp (Photo by G. Weisz)



Drawing of Chinese cook by Amber Rankin (PAR Environmental Services, Inc.)

network of transcontinental and regional railroads.

The volume begins with a discussion of the strength of collaboration, and why historical archaeology provides an excellent springboard for exploring the daily lives of the railroad workers. Book chapters include: Building the Railroad: Adapting to a New Environment; Defining Identity; Health and Well-Being; Leisure; and Leaving a Legacy. Drawings by graphic artist Amber Rankin help to imagine the workers' experiences. Appendices include a full-color index of all illustrations (photographs, drawings, maps, etc.) including captions and credits, and a timeline of the events leading up to the construction of the Central Pacific Railroad (CPRR), the hiring of Chinese workers, construction progress of the CPRR, later construction of regional railroads, laws affecting workers, and recent efforts to commemorate the work of these individuals.

The idea for this book stemmed from the first meeting of the Archaeology

Workshop of the Chinese Railroad Workers in North America Project at Stanford University in October 2013. The Project's goal is to gather information on the lives of Chinese laborers who worked on the Transcontinental Railroad between 1865 and 1869, bringing together scholars from a variety of disciplines (history, literature, archaeology, visual and performing arts) and members of the public. A book launch was held for “Finding Hidden Voices of the Chinese Railroad Workers: An Archaeological and Historical Journey” in an April 2016 gathering at Stanford, which drew scholars from China, Taiwan, Canada, and the United States. The authors and contributors were honored for their work.

The book is part of the Society for Historical Archaeology's (SHA) Special Publication Series, and is available for purchase through SHA-Lulu press bookstore, for \$65.00 (<http://www.lulu.com/shop/sha-copublications/finding-hidden-voices-of-the-chinese-railroad-workers/hardcover/product-22602821.html>). ❧



The authors and artist being honored at the book launching at Stanford University. From L to R: Mary L. Maniery (PAR), Amber Rankin (PAR), Sarah Heffner (PAR), Rebecca Allen (ESA)

RESEARCH CORNER

Digital Archive

By Sarah Heffner

Sarah Heffner and Mary Maniery are collaborating with Chelsea Rose, Staff Archaeologist at Southern Oregon University's (SOU) Laboratory of Anthropology, on the creation of an online digital collection of Chinese artifacts that will be hosted by SOU's Hannon Library.

The collection will feature high-resolution photographs of Chinese material culture commonly found on archaeological sites in the American West. The goal is to provide archaeologists, historians, and other researchers with a visual reference tool for identifying and researching Chinese artifacts. It will be organized by functional category and cross-referenceable across multiple categories. The metadata will also include information on material type, origin, manufacturer, industry comment (such as global markets,

pottery trends, etc.), repository of the pictured item, dates, and notes. Site type (e.g., mining, railroad camp, Chinatown) will also be included for comparative purposes. Notes will include "fun facts," field observations, distribution patterns, etc. All of this will be peer reviewed prior to launching the website.

The database will also include links to relevant articles and websites, including the Asian American Comparative Collection (AACC) and Chinese in North America Research Committee (CINARC) websites.

Sarah Heffner has been working with Shana Sandor, Digital Projects & Electronic Resources Specialist at SOU's Hannon Library, to take professional photographs of materials from PAR's American River Chinatown excavation, as well as materials housed in the California State Parks Statewide Museum Collections Center in Sacramento.

Example photographs are shown below. [↗](#)



Figure 1.
Bone domino from Yreka Chinatown



Figure 2.
Tiny Winter Green cup from
American River Chinatown

SPOTLIGHTS

➡ John W. Dougherty is credited as the third author in a chapter in the new publication *Plainview: The Enigmatic Artifact Style of the Great Plains*. The chapter considers concave-based projectile points from the Great Basin and California that are cotermporal with Plainview. Entitled "Discriminating Black Rock Concave Base Points from Other Western Paleoindian Projectile Points," by Michael F. Rondeau, Geoffrey M. Smith and John W. Dougherty, the paper will appear as Chapter 10 in the new book when it is released by the University of Utah Press.

➡ In July of 2016 PAR contracted with Humboldt State University (HSU), Bear River Rancheria, and other local experts in Humboldt County. PAR and HSU completed data recovery excavations at an inland Outer Coast Ranges prehistoric site near Kneeland, CA. Analysis of the material is currently underway. Through this and similar work we hope to contribute and disseminate meaningful data to this region of California.

PAR'S ARCHITECT FIRM'S EXPERIENCE IN PR



PAR Technical Reports Still Available:

Test Excavations at CA-MEN-2138, Redwood Valley, California.

PAR Environmental Services, Inc.
Technical Report No. 1, 1994

By James Gary Maniery
Cost \$3.00

The Natoma Site, Archaeological Test Excavations at CA-SAC-166.

PAR Environmental Services, Inc.
Technical Report No. 2, 1996

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.
Technical Report No. 3, 1999

By Sean Berry
Cost \$6.75

NEWS FLASH ITEMS

- The Society for California Archaeology celebrated its 50th birthday in Ontario, CA in March of 2016. The meeting was kicked off with a Plenary Session summarizing the past 50 years of archaeology in California and focusing on future directions. Mary's presentation, *A Perspective on Historical Archaeology in California*, began with a look at the salvage archaeology of the 1960s, discussed the general identification of historical artifacts that occurred in the 1970s, and studies of site and artifact function and classifying use of the 1980s. She also talked about the continuation of the 1970s and 1980s research with the addition of detailed stratigraphic analysis, theoretical models, gender studies, and public outreach of the 1990s through the 2000s, and ended with a look at the future directions in the twenty-first century, including increased reliance on bioarchaeology, chemical analysis of soils and product residue, and the use of drones, tablets, GIS, and modern technological innovations in the field.
- Similar to the Plenary Session, Mary Maniery and co-chair Rebecca Allen led a session at the SCA meeting titled **The Past and Future of Historical Archaeology in California: Agency, Academia, and CRM**. Presentations revisited the past and looked at the future of historical archaeology, and included papers on the past, present, and future directions of historical archaeology in California, with a heavy reliance on presentations from former and current California State Parks staff. Subjects including women in archaeology, underwater archaeology, studies of 1960s hippie culture, the growth of California State Parks programs between the 1930s and today, and the need to adopt and study "orphaned" and abandoned collections from these early efforts that are gathering dust in various repositories. Mary's presentation, *The History and Future of Community Based Archaeology and Public Outreach*, discussed the growth of public archaeology and provided ideas and examples on how to reach out to the public on even the simplest project and with a minimal budget.



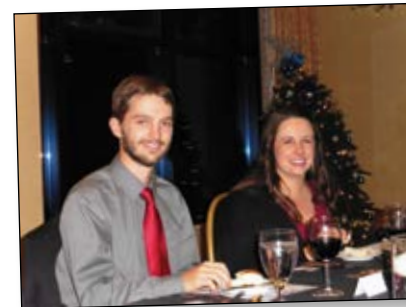
Josh and Amber accept awards at PAR's 2015 Christmas Party in Reno, Nevada



Josh and John on survey



Ellie and Josh record path in the Mojave desert



Josh and Mallory at the 2015 Christmas Party

PAR 2016 UPDATE

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DESIGN:
Heather Rose Design, Manhattan Beach
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ANNOUNCEMENTS

CALIFORNIA
AUTOMOBILE
MUSEUM

Dear PAR Environmental Services,

The California Automobile Museum and the California Vehicle Foundation would like to formally thank you for your involvement in our summer camp program, "Modes of Motion". Your staff helped enrich our program with an educational experience that the campers will not forget. Education for all ages is one of the primary goals of the California Automobile Museum, and we are thankful that it is a priority for your business as well.

We also believe that fostering partnerships and collaborative relationships with other organizations is not just beneficial to our mission, but imperative to develop a community that supports education in all its forms.

Thank you, and we hope to work with you in the future.

Sincerely,



Education Program Coordinator
California Automobile Museum

LOCAL CHARITIES & NON-PROFIT ORGANIZATIONS

- Plumas County Charities
- Heyday Books
- University of Idaho, Asian American Collection Center
- Sacramento Archaeological Society
- Society for California Archaeology
- Society for Historical Archaeology



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 and the West.



Sarah and Mary at historic site in the Mojave



PAR CFO and former newsletter editor Gary Maniery gives speech at the 2015 PAR Christmas party



Ellie taking notes on Humboldt County project



Crew photo on Mojave Project

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All smiles on a typical work day in 2016