JANUARY 2014

PCAS NEWSLETTER
THE MONTHLY PUBLICATION OF THE
PACIFIC COAST ARCHAEOLOGICAL SOCIETY
www.pcas.org

JANUARY PCAS SPEAKER
Steve Freers
Stature and Gender Projections from Pictograph Handprint Evidence in Southern California

The anthropometric and ethnographic analytical design from an earlier site-specific study of pictograph hand print impressions (Freers 2001) was applied to a regional analysis of 480 handprints from 49 rock art loci in southern California. The goals of this investigation were to infer the physical stature and gender of the most likely Native American participants by applying four published stature and gender predictive equations (Abdel-Malek 1990; Bhatnagar 1984; Jasuja 2004, Thakur 1987) and determine their field efficacy and predictive (Continued on p. 3)

PCAS MEETINGS CALENDAR
GENERAL MEETING
Free and Open to the Public
January 9 - 7:30 pm

Speaker: Steve Freers
Topic: Stature and Gender Projections from Pictograph Handprint Evidence in Southern California
Location: IRWD Community Room
15500 Sand Canyon Ave., Irvine

The Irvine Ranch Water District neither supports nor endorses the causes or activities of organizations that use the District’s meeting rooms which are made available for public use.

BOARD MEETING
All Members Welcome
January 16 - 7:00 pm
Location: Old Orange County Courthouse
PCAS Library, Ground Floor
211 W. Santa Ana Blvd., Santa Ana

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Happy New Year!
Have you renewed your membership?
Use the membership form in this Newsletter.

DINNER WITH THE SPEAKER
Please join this month’s speaker, Steve Freers, and PCAS members for dinner before the January 9th General Meeting. We will meet at 6 pm at Mimi’s Café, 4030 Barranca Parkway, Irvine.
DECEMBER SPEAKER NOTES

Rock Art and the Cultural Landscape:
A Study in the East Mojave

Submitted by Megan Galway

Longtime PCAS member and rock art researcher Don Christensen told of his 20 years of studying rock art in the Mojave Desert. For the purpose of this study, the Mojave Desert was defined as an area roughly bounded by Las Vegas to the north, Ludlow to the west, Kingman to the east, and Lake Havasu City to the south. Christensen notes he places little or no emphasis on attempting to interpret rock art, but rather tries to incorporate sites into the cultural landscape. Along with pictographs and petroglyphs, he includes intaglios, cairns, rock rings, rock alignments, and trails into his studies.

His earlier Opal Mountain survey encompassed 36 square miles (PCAS Quarterly 29(2):27–63). Forty-four rock art sites were recorded with 1,200 elements. A comparison of symbol versus site function produced no correlation. In 1993 in an attempt to determine rock art association with trail systems, Christensen surveyed the trail from Eagle Pass to Needles through the Sacramento Mountains. He mapped two trail segments, 1.0 and 1.5 miles in length, using a compass and 50 meter tape! Rock art was found to be within 1 to 12 m of the trail, and 116 boulders with 429 elements were recorded. In 1994 the BLM permitted a survey of the area from the Colorado River to Ludlow. Sites were sampled, with priority given to drive-up sites and a focus on pictographs. These were considered to be the most “at risk” because of the potential for vandalism and weathering of pictographs.

In the 20 years since 1993, Christensen and his colleagues have recorded 345 rock art sites with 32,444 elements, only about 3,900 of which were pictographs. In recording a site the team measures the panel, draws and photographs the images, and measures the depth of petroglyphs. They also note the local vegetation and any artifacts and draw a site map. Associated artifacts, in particular, may hint at the chronology of the site. Superimposition (symbols etched or painted over earlier images) is often seen and shows work being done over a period of time, but this and various stages of repatination can only provide relative chronology. Subject matter in representational images—such as a bow and arrow or a man on horseback—may offer more definitive dating.

The study defines rock art in the area by different styles or traditions. The Western Archaic (pre-Numic) tradition is noted for abstract, curvilinear elements. The Grapevine (Patayan) tradition includes geometric recti-linear, symmetrical symbols along with digitated figures and masks. Ancestral Puebloan elements are figurative and representational. The most recent panels are attributed to Southern Paiute people. These are often identified by representations of horses, Christian crosses, and other historic images.

A motif inventory of approximately 50 elements was developed to assist in the recording process, but this inventory did vary by location. Pictograph sites were found to use predominately red paint (99 percent), with 27 percent using black, 19.5 percent white, and only 1 percent yellow. No green was recorded. Representational elements were found in only 2 percent of non-Puebloan sites.

The study placed emphasis on the location of rock art in relationship to the cultural landscape. Christensen noted the four requirements for successful occupation of an area: subsistence, shelter, water, and access routes. By identifying these features on the landscape and then comparing rock art concentrations, it appears that petroglyphs, in particular, are more likely found along the trails and access routes rather than near habitation sites. Additionally, 75 percent of pictographs were found within 800 m of water, but only 59 percent of petroglyphs. In the area between the Granite Mountains and Kelso Dunes, the study recorded 17 trails and 71 cairns. No functional purpose has been identified for the cairns.

Christensen avoids any attempt to interpret rock art, pointing out that many elements were most likely based in local mythology, history, ritual, and politics, and that these concepts change over time. We know some groups had songs—oral maps of their world—which defined their kinships and territories. Presentation of these songs could take all night. Like many Native languages these songs are being lost and along with them any chance of relating them to the rock art.
HOLIDAY GATHERING
A wonderful time was had by all …

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And thanks to all who helped set up and clean up.

January Speaker (continued from p. 1)

agreement level. The large sample size helps ameliorate some of the variability and control problems inherent in the metric analysis of pictograph handprints and provides statistically significant trends. The resulting data was analyzed against the backdrop of our current ethno-graphic understanding and contemporary assertions of regional rock art style and function. This visually rich presentation will demonstrate to the audience how the data aligns with examples of pictographic rock art comprising the La Rumorosa, Rancho Bernardo, and San Luis Rey Styles.

Steve Freers is a secondary AP and IB chemistry teacher in Riverside County, California. He has spent the past 24 years researching Native American rock art in Riverside and San Diego Counties, as well as concentrated studies in the Grand Canyon region. When student interest warrants, he teaches Native American Rock Art academic and field courses for The University of California, Riverside. In 1994, he co-authored the book Fading Images on the western Riverside County area and served for five years as the senior editor of the annual publication for the American Rock Art Research Association (ARARA). Recently, the results of an extensive rock art recording project in Grand Canyon National Park, BLM/Arizona Strip, and the Kaibab National Forest by Don Christensen, Jerry Dickey and Steve Freers culminated in their book, The Rock Art of the Grand Canyon Region, produced by Sunbelt Publications and released in the Spring of 2013. Steve’s specialty is taking a physical anthropological approach to the analysis of handprints. Using anthropometric data collected in the late 1800s and early 1900s by the famous anthropologist Franz Boas, he developed a regression equation that assists in predicting the physical stature and gender of the makers of prehistoric hand impressions. The regional results of this 10-year research project were presented at the International Federation of Rock Art Organizations in May 2013 and the annual San Diego Museum of Man Symposium, November 2013.

JANUARY CURATION WORKDAY

When: January 11, 2014, 1 pm
Where: Red Car Building

Everyone is welcome. Please contact Mark Roeder (714-299-4150, curator@pcas.org) or Scott Findlay (714-342-2534, fieldtrips@pcas.org) for directions and to let us know you will be coming.

Scott Findlay was the lucky winner of a kachina doll donated by Joe Hodulik. Proceeds from the Donation-Award drawing will go to the PCAS Scholarship fund.
The visual inventory of Native-made articles rounds out with notice of three additional pottery receptacles which, like the others mentioned above, were the product of coiling together slender clay cylinders and applying the paddle-and-anvil technique. The three specimens, two cooking pots and a large storage (?) pot line up at center photo, the lower cooking pot with the handle of a metal spoon peeking out of its opening and the higher cooking pot in which rests a wooden stirring paddle.

Manifestations of acculturation are evident not just with the metal spoon but with Mrs. Lomas’ clothing and an iron skillet at upper right (near the shovel) with what appears to be a tortilla draped across its leading edge. Did the shovel serve as the functional equivalent of the digging stick? Several other objects in the photograph are too indistinct for positive identification, one of which, hidden among shadows at the far upper left, may be a granary.

In closing, the author recommends Paul Campbell’s (1999) book on the survival skills of Native California for rich detail on the kinds of objects noted here but also a host of other kinds of Indian artifacts.

References Cited

Campbell, Paul Douglas
1999 Survival Skills of Native California. Gibbs-Smith, Salt Lake City.

Kroeber, Alfred L.

Just over a meter forward of Mrs. Lomas, there is another deep basket, relatively small, that holds ground meal. It is balanced atop the rim of a medium-mouthed, fire-clouded, earthenware jar of the kind frequently associated with seed storage, but also used to hold water. Juxtaposed to these there is a small-mouthed olla, undoubtedly a container for water.

There are yet more woven articles in the photograph. At the far right, mid-picture, sit two twined seed beaters. Kroeber (1908:45, Plate 3) described those of the Cahuilla as constructed of an unusually small number of sticks and as being peculiar in the parallel arrangement of those sticks along the middle of an encircling hoop. Also, displayed on a wooden box, near the large earthenware olla, are sandals that were likely fashioned either of yucca fibers or of mescal fibers (see Kroeber 1908:32–33, Plate 10).

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Campbell, Paul Douglas
1999 Survival Skills of Native California. Gibbs-Smith, Salt Lake City.

Kroeber, Alfred L.
PCAS SCHOLARSHIPS

PCAS offers two annual scholarships—the Gloria Bogdan Memorial Scholarship and the Myrtle Soderberg Memorial Scholarship. The Gloria Bogdan Scholarship is fully funded by Tom Bogdan in memory of his wife. The Myrtle Soderberg Scholarship is funded by PCAS through Joe Hodulik’s Donation-Award table at monthly meetings and directed donations by members. The scholarship recipients are chosen by the PCAS Board of Directors which considers the recommendations of the Scholarship Committee. Recipients of each scholarship receive $1,000.

Gloria Bogdan (1944-2009)

Gloria was born in Hawaii of Japanese and Cherokee parents and was raised by her Cherokee grandparents in Oklahoma. She attended CSU Fullerton and received her MA degree in Anthropology. Later she earned a PhD in Education. She taught at CSU Fullerton, Orange Coast College, and National University in the areas of Native American, Asian, Religious, and Women’s Studies. She served as faculty advisor for many student organizations. Gloria was a curatorial assistant at Bowers Museum for many years, and she was the first curriculum developer for Native Peoples Magazine.

As a Life Member of PCAS, Gloria was very active in PCAS, taking part in outreach events and field trips. She often served as a bridge between the Native American community and other organizations. For those of us who knew her, she will always be remembered for her generosity and unrelenting assistance to students and those in need. She taught us the importance of helping others.

Myrtle Soderberg (1899-1997)

Myrtle she joined the Navy as a Yeomanette in 1918 during WWI, but her secretarial position didn’t provide the adventure she desired. In 1923 she and a friend decided to hike from Philadelphia to Los Angeles, where she met her future husband, an accountant for Shell Oil. Married in 1926, they lived in Seattle, the California Central Valley, and finally Newport Beach.

As a member of the Orange Coast Mineral and Lapidary Society, she and her friends encountered artifacts and other indications of prehistoric people on their rockhounding field trips. Their interest led to the founding of PCAS in 1961 with Myrtle as a founding member and Treasurer. Her daughter, Jane Gothold, has served as PCAS President, Vice President, Treasurer, and Curator and is presently Archivist/Librarian. Myrtle bequeathed funds to PCAS to begin the PCAS Scholarship program.
DIG THIS...

Exhibits

*Connecting the Seas* uses special collections to reveal how adventures on other continents and discoveries of different cultures were perceived, represented, and transmitted in the past, when the primary means of travel was by ocean. The Getty Research Institute, Getty Center, through April 13, 2014. Free; fee for parking. Information: [www.getty.edu](http://www.getty.edu).

Lectures

*Wepwawet in Westwood Comes to Orange County*, by UCLA doctoral students in Egyptology presenting their latest research. An ARCE event, Bowers Museum, January 11, 1:30 pm. Free. Information: [www.bowers.org](http://www.bowers.org) or 714-567-3677

*Excavated Seaport Provides Window on Ancient Mediterranean World*, by Dr. Marie-Henriette Gates (Bilkent University, Turkey), presented by the AIA, Orange County Chapter. DeNault Auditorium in Grimm Hall, Concordia University, January 26, 2 pm. Fee: $5; members and students free. Information: [http://aia-oc.org](http://aia-oc.org).


*Tea Horse Road: The World’s Oldest and Highest Tea Trade Route*, by Dr. Selena Ahmed, January 16 7 pm; *Silk Road Journeys of the Eurasian Lute*, by Dr. James Millward, January 30, 7 pm. Both part of the Raveling the Silk Road Lecture Series, Natural History Museum of Los Angeles County. Information: [www.nhm.org](http://www.nhm.org).

Classes, Meetings, and Events

*Archaeology for Citizen Scientists: An Introduction 2014*, by Joan S. Schneider, PhD, a six-week Anza-Borrego Foundation course on Thursday evenings (classroom, 6–9 pm) and Fridays (field class, 9 am–3 pm). January 9–February 14. Fee: $350 (members $300); UCR Extension credit, $550 (members $485); single class, $75 (members $65). Information and registration: [http://theabf.org](http://theabf.org).

*Field Trip to Blair Valley*, by Dan McCarthy, January 19, 9 am–noon; *The Use of Plants by Native People*, Dan McCarthy, January 19, 4–5:30 pm; *Rock Art of the Grand Canyon*, by Steven Freers, January 24, 6–7:30 pm. All programs of the Anza-Borrego Desert Natural History Association. Fees vary. Information and registration: [www.abdnha.org](http://www.abdnha.org) or 760-767-3098.


*Rock Art of Southern California*, by Daniel McCarthy, February 23, 8 am–6 pm; *Intaglios Along the Colorado River*, by Daniel McCarthy, March 2, 7:30 am–6 pm; *Native American Plant Uses*, by Daniel McCarthy, March 23, 9 am–4 pm. All classes of the Joshua Tree Desert Institute. Fee for each class: $60 (members $50). Information and registration: 760-367-5535 or [www.joshuatree.org/desert-institute](http://www.joshuatree.org/desert-institute).

Visit [www.pcas.org](http://www.pcas.org) for all the latest news.

Editor’s Note: Please confirm time and place of listing prior to the event. Submit items for Dig This to newsletter@pcas.org.
**PCAS CODE OF ETHICS**

The Pacific Coast Archaeological Society (PCAS) is a non-profit group of professional and avocational people dedicated to proper management of our cultural resources, public education, and the protection and preservation of archaeological materials and collections.

The following principles have been adopted by the PCAS:

1. Professional methods and forms will be used on all archaeological field surveys, excavations, and laboratory sessions.
2. A complete record of field and laboratory work will be filed with the PCAS Curator and stored at a facility approved by the Society’s Board of Directors.
3. No archaeological materials will be removed without proper permits, landowner permission, and a field research design.
4. Unless otherwise legally stipulated before activity commences, all materials collected will be deposited for further research with the Curator at a facility approved by the Society's Board of Directors.
5. All generated reports will be the property of the Society and distributed as deemed appropriate.
6. All Society field activities will be performed only under the direction of a qualified field archaeologist (Principal Investigator) and the supervision of field or site directors.
7. The above principles will be observed on both Society approved projects and projects performed under the direction of an authorized institution or organization.
8. The Society and its members will strive to educate the public of the importance and proper management of our non-renewable cultural resources and to discourage the collection and commercial exploitation of archaeological materials.
9. PCAS members shall not benefit from the acquisition, purchase, sale, or trade of archaeological artifacts, materials, or specimens.
10. All members shall adhere to City, County, State, and Federal antiquities laws.

**PCAS SPEAKER CALENDAR**

**February 13, 2014**
Dr. Micah Hale  
*Adaptive Divergence Among Southern California Hunter Gatherers*

**March 13, 2014**
Dr. Todd Braje  
*The Intersection of Archaeology and Restoration Biology in the Age of the Anthropocene*

**April 10, 2014**
John Rafter

**May 8, 2014**
Cara Ratner

**COME TO THE JANUARY 9TH MEETING!**

Positive impression handprints, CA-RIV-114.
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*Denotes PCAS Board Member

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2014 Calendar Year Membership and Subscription Form

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Newsletters will be sent by email unless a mailed copy is requested.

_I have read and agree to abide by the PCAS Code of Ethics_ ____________________________

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