



DECEMBER 2017

# PCAS NEWSLETTER

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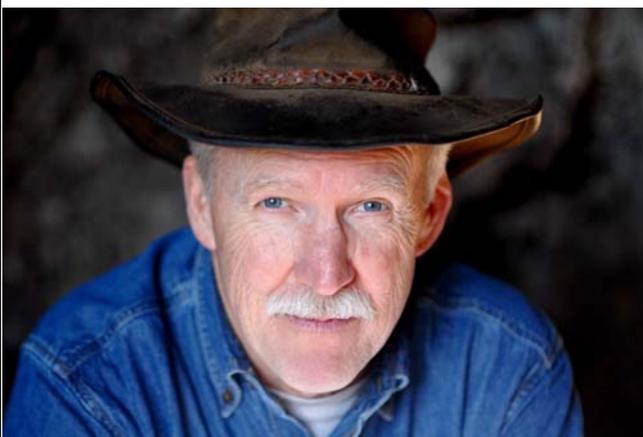
## DECEMBER PCAS SPEAKER

**Dr. Dennis L. Jenkins**

*Archaeology and Science at  
the Paisley Caves*

Dr. Luther Cressman's 1938–1940 excavations at the Paisley Caves in Oregon discovered exciting evidence suggesting that people may have lived there as early as the Late Pleistocene, some 12,000 to 15,000 years ago. However, it was not until recent developments in Ancient DNA testing that he was proven correct. Dating of camel and horse bones, artifacts, twigs, and dried human feces containing Native American DNA between 12,900 and 14,500 years ago indicates that people lived in the caves and probably hunted camels, horses, and other animals at the end of the Pleistocene. This colorful PowerPoint presentation explains the scientific processes and results of archaeological

*(Continued on p. 3)*



Dr. Dennis L Jenkins.

**The Holiday Potluck replaces Dinner with the Speaker this month. See page 4 for information.**

## PCAS MEETINGS CALENDAR

### **HOLIDAY POTLUCK**

**December 14 - 6:30 pm**

**RSVP - see page 4**

**Lecture: 7:30 pm**

**(free and open to the public)**

**Speaker:** Dr. Dennis L. Jenkins

**Topic:** *Archaeology and Science at the Paisley Caves*

**Location:** The Duck Club, Irvine  
See map and directions on page 5

*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.*

## **NO BOARD MEETING THIS MONTH**

### **INSIDE THIS ISSUE**

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**Renew your PCAS membership!  
Pay online with PayPal—see page 2.**

## NOVEMBER SPEAKER NOTES

### *Four Thousand Years of Cacao Cultivation and Consumption in Mesoamerica*

*By Megan Galway*

Dr. Gasco admitted that when she began working in the Soconusco region of Chiapas, Mexico, over 35 years ago she had no particular interest in the history of chocolate. However, over time, she came to understand the importance of this resource to the people of the area.

The cacao tree originated in the Amazon valley where 10 varieties have been identified, but only one variety that is now found in Central America is used in the production of chocolate. The tree grows in areas with well-drained soil, an average temperature of 80 degrees, and an annual rainfall of around 2 meters. The area around Soconusco, encompassing parts of Mexico, Guatemala, and Honduras, meets these requirements.

In a ripe cacao pod, the seed is surrounded by a pulpy mass beneath the husk. The pulp may be sucked directly from the pod or processed with additional spices into beverages such as agua de cacao or cacao chica. The juice can also be fermented, but this process is not visible in the archaeological record. The seed is dried, toasted, and mixed with water to create the beverage that has developed into cocoa. This drink was originally served cold and foamed by using a whisk-like tool or by pouring from a height from one vessel to another. Residue testing has identified cacao on vessels from the Soconusco area dating to 1900–1800 BC. In the Late Classic period (AD 600–900), Maya pottery bore illustrations depicting the drink being prepared and offered. Based on the styles of the containers, this was judged to be high-value content, and some of these vessels bear inscriptions identifying them as the cacao vessel of a specific high-status individual.

Cacao residue has been found in the Olmec area dating from 1800–1000 BC, and by 1000 BC to AD 900, it is seen in Belize and Honduras. The cacao seed was used as currency or a trade item and appears on an Aztec list of taxation or tribute items. Based on these lists, the annual amount of tribute was estimated between 5 and 10 tons. The Aztec considered cacao to have medicinal qualities, and it was traded for turquoise and metal goods. Residue has also now been identified in the Chaco complex in New Mexico and southern Colorado.

After the Spanish invasion in 1520, cacao was taken to Spain and with the addition of sugar was



**Speaker Dr. Janine Gasco and PCAS Programs Co-Chair Joe Hodulik at the November meeting.**

referred to as chocolate. During the seventeenth and eighteenth centuries, it became popular in Europe and was being grown in Southeast Asia. The nineteenth century saw the invention of the Van Houten cocoa press and the development of bar chocolate, and Africa became the main producer. World production has grown from 53,000 tons annually in 1900 to 4,250,000 tons today. Expanding markets in India and China may create shortages and price increases.

In Mesoamerica the processing and use of cacao are little changed, and it still has special significance. In the Mexico City Cathedral, a statue known as Our Lord of Cacao still receives offerings of cacao beans, and the city of Tabasco holds an annual Cacao Festival. The Aztec claims of health benefits have been endorsed by the medical profession in that the seeds contain flavonols, good for cardio-vascular health. We were warned that this benefit could not be gained by eating regular candy bars but only from high percentage dark chocolate. Chocolate and toasted cacao beans were offered for us to sample.

## RENEW YOUR MEMBERSHIP ONLINE!

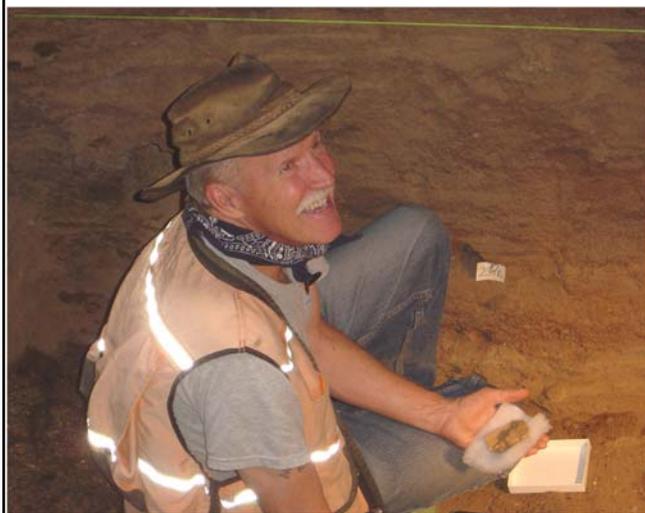
PCAS memberships expire at the end of the calendar year. Memberships can be renewed for 2018 at [www.pcas.org/membrs.html](http://www.pcas.org/membrs.html) through PayPal with any credit card. A PayPal account is not necessary. If your mailing address, phone number, or email has changed, please email [membership@pcas.org](mailto:membership@pcas.org) with the correct information. Renewal forms are also available in this newsletter and on our website for members and subscribers wishing to renew by mail.

We appreciate your continued support of PCAS and look forward to receiving your renewal for 2018.

## December Speaker *(continued from p. 1)*

and paleogenetic investigations at the Paisley Caves, bringing the audience the most up-to-date information about the evidence for the pre-Clovis (13,000 years ago) interaction of humans and Pleistocene plants and animals in Oregon's high desert country more than 14,000 years ago.

Dennis Jenkins is a Senior Research Archaeologist II for the Museum of Natural and Cultural History at the University of Oregon where he received his Ph.D. in 1991. A native Oregonian, he was raised in Las Vegas, Nevada, where he earned his BA (1977) and MA (1981) in anthropology at UNLV. He has taught and directed the UO's annual Northern Great Basin archaeological field school in central Oregon since 1989. His research focuses on the first colonization of the Americas, obsidian sourcing and hydration, prehistoric shell bead trade, and settlement-subsistence patterns of the northern Great Basin. He is an active researcher with publications in such prestigious journals as *Science* and *Nature*. He has made 11 appearances in television documentaries aired on History Channel, National Geographic, Oregon Public Broadcasting, Canadian Broadcasting, the Archaeology Channel, Danish TV, and will soon appear on Japanese TV. Jenkins has authored, co-authored, and edited eight books, 47 journal articles, chapters, reviews, and published papers, and more than 40 professional reports. He has presented 66 papers at professional conferences and served as conference and symposium chairs for the Great Basin Anthropological Conference and Northwest Anthropological Conference. He is internationally recognized for the identification of ancient human DNA in Pre-Clovis coprolites more than 14,000 years old, the oldest directly dated human remains in the Americas, at the Paisley Caves in the Summer Lake basin of south-central Oregon.



## NOVEMBER FIELD TRIP TO THE PALEN-MCCOY WILDERNESS

*By Stephen Dwyer*

Martin and Mary Jespersen and George Kline gave a May 2017 PCAS lecture describing how they relocated and documented two petroglyph sites in the Palen Mountains. In November, they guided a PCAS field trip to the sites, which are as wonderful as they described. See photos below.

In addition to petroglyphs created by pecking and abrasion, large numbers of scratched petroglyphs are present. A possible horse-and-rider motif, if that is what it is, could date to post-contact times. Historic markings date back to 1873 and include names, dates, and a few descriptions of where to find water.

The hike there and back passed through one of General George Patton's World War II combat training areas. Still visible are foxholes, trenches, gun and tank emplacements, and barbed wire.





# PCAS HOLIDAY DINNER

**Thursday, December 14, 2017**

**6:30 PM**

**IRWD Duck Club\***

## **Annual Holiday Potluck**

**Dr. Dennis L. Jenkins will speak on**

*Archaeology and Science at the Paisley Caves*

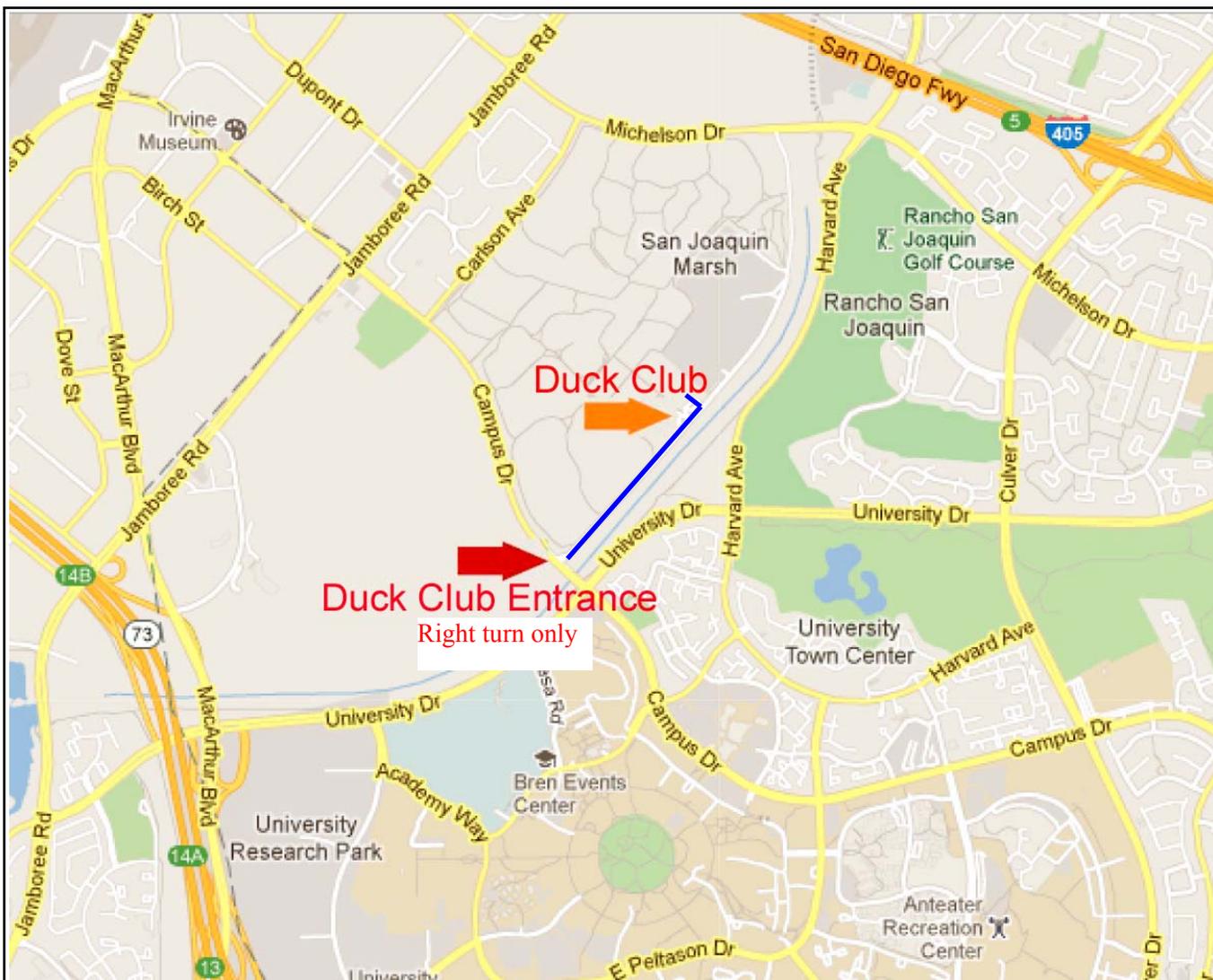
*Lecture at 7:30 pm – free and open to the public*

- 1. The Holiday Dinner will be at the Duck Club\* in Irvine.**
- 2. Bring a ready-to-serve dish that doesn't require heating to serve 6 people.**
- 3. No alcoholic beverages are allowed.**



Contact Megan Galway, [membership@PCAS.org](mailto:membership@PCAS.org)  
or 714-539-6354, to let us know what you're  
bringing.

\*See directions to the Duck Club on the following page. Directions are also available at [www.pcas.org](http://www.pcas.org) (click on Latest News on left menu).



**Note: The entrance from Campus Drive is right turn only.**

## **Directions from I-405**

- 1. Exit the 405 Freeway on Culver Drive and go south.**
- 2. Turn right on University Drive.**
- 3. Turn right on Campus Drive.**
- 4. Stay in the right lane and immediately turn right onto Riparian View which is marked by a dark green sign identifying it as the entrance to the San Joaquin Wildlife Sanctuary.**
- 5. Proceed to Duck Club entrance on left. Signs will direct you.**

**If lost, call 714-290-1845.**

## DIG THIS ...



### Lectures

***Food Fit for Pharaohs: Food and Drink in Ancient Egypt***, by Dr. Salima Ikram (American University in Cairo). An ARCE lecture, Bowers Museum, December 9, 1:30 pm. Fee: \$12; Bowers and ARCE members free. Information: [www.bowers.org](http://www.bowers.org) or 714-567-3677.

***A Photographic Journey of Ancient Winter Solstice Sites***, by Alan Garfinkel Gold. A Coachella Valley Archaeological Society presentation, Portola Community Center, 45-480 Portola Ave., Palm Desert, December 21, 6:30 pm. Free. Information: [www.cvarch.org](http://www.cvarch.org).

***Archaeological Site Recording and Management Issues at Coyote Hole***, by Daniel McCarthy. San Diego Rock Art Association lecture. Kumeyaay-Ipai Interpretive Center, Poway, December 10. Potluck 4 pm; presentations 5 pm. Fee: Donation \$5; members free. Information: [www.sandiegorockart.org](http://www.sandiegorockart.org).

### Classes, Meetings, and Events

***Seldom Seen Stones: the Robert Begole Collection of "Palaeolithic" Stone Tools from Anza-Borrego Desert State Park***, by Dr. Curtis Runnels (Boston University). Steele/Burnand Anza-Borrego Desert Research Center, 401 Tilting T Dr., Borrego Springs, December 16, lecture 10–11 am, hands-on session 12 noon–3 pm. Fee: \$35, members \$25; lecture only \$5. Information and registration: [www.theabf.org/anza-borrego-focus-seldom-seen-stones](http://www.theabf.org/anza-borrego-focus-seldom-seen-stones).

***Rock Art of Southern California Spring 2018***, by Daniel McCarthy. A class of the Joshua Tree National Park Desert Institute. February 18, 2018, 8 am–6 pm. Fee \$70, members \$60. Information and registration: [www.joshuatree.org/desert-institute/field-classes](http://www.joshuatree.org/desert-institute/field-classes).

**Editor's Note:** Please confirm time and place of listing prior to the event. Submit items for Dig This to [newsletter@pcas.org](mailto:newsletter@pcas.org).

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

## NOVEMBER BOARD MEETING SUMMARY

Vice President **Hank Koerper** called the November 11 meeting to order at 12:05 pm at the Red Car Building, Santa Ana. PCAS Board members present: **Bob Brace, Gail Cochlin, Megan Galway, Joe Hodulik** (via speaker phone), **Kathleen Shada**, and **Brian Steffensen**. PCAS members present: **Rene Brace, Scott Findlay**, and **Jane Gothold** (via speaker phone).

The October minutes were approved. Treasurer **Bob Brace** reported that \$444 of PCAS Quarterly issues were sold at the Rock Art Conference. The Treasurer's report was approved with expenditures.

The slate of nominees for the 2018 Board—**Scott Findlay, Jane Gothold**, and **Steve O'Neil**—was unanimously approved by the membership at the November 9 meeting. The Board thanked retiring members—**Stephen Dwyer, Hank Koerper**, and **Kathleen Shada**—for their service.

The Board agreed to a donation of PCAS Quarterly issues to the Blas Aguilar Museum. The Board approved a \$65 table fee for the March SCA Meeting. Additionally, it was agreed to make our regular SCA silent auction donation of two packets of four PCAS Quarterly issues with an index. Steve O'Neil reported that after contact with the Native American Heritage Commission, sensitive items from ORA-291, ORA-371, ORA-356, and ORA-555(83) were returned to the Juañeno Band of Mission Indians.

The Board discussed plans for the Holiday Potluck dinner. PCAS will supply a platter of sliced ham. Brian Steffensen will pick up Dr. Jenkins at the hotel.

**Joe Hodulik** received donations of \$214 in October and \$123 in November for the Scholarship fund! **Steve Dwyer** reported on the field trip to Vandenberg AFB. Swordfish Cave could not be visited because of a wildfire, but PCAS members visited other sites and the Lompoc Museum. George Kline and Martin and Mary Jespersen will lead a November 17–20 field trip to the Palen Mountains. They discussed this area in the May 2017 PCAS lecture.

The meeting was adjourned at 1 pm.

**NO CURATION WORKDAY  
IN DECEMBER**

## PCAS CODE OF ETHICS

The Pacific Coast Archaeological Society (PCAS) is a nonprofit 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 thanks the San Diego Rock Art Association for allowing us to have a *PCAS Quarterly* sales and information table at Rock Art 2017 on November 4. The Symposium was a great success, and we look forward to Rock Art 2018! For more information about the San Diego Rock Art Association, go to [www.sandiegorockart.org](http://www.sandiegorockart.org).

## PCAS SPEAKER CALENDAR

**January 11, 2018**

**Bernie Jones and Dr. Chris Drover**

*Flower World Metaphor, Ideology, and Iconography of the Southern Colorado Plateau: The Puerco and Little Colorado River Watersheds*

**February 8, 2018**

**Dennis Gallegos**

*First People—A Revised Chronology for San Diego County*

**March 8, 2018**

**John Rafter**

**April 19, 2018**

**Don Liponi**

*La Rumorosa Rock Art*

**May 10, 2018**

**Dr. James S. Kus**

*What's New in Machu Picchu?*

## 2017 PCAS BOARD MEMBERS AND COMMITTEE CONTACTS

<u>Office</u>	<u>Name</u>	<u>Email</u>	<u>Phone</u>
*President	Sherri Gust	president@pcas.org	714-245-0264
*Vice-President	Hank Koerper	vicepresident@pcas.org	714-633-9287
*Secretary	Megan Galway	secretary@pcas.org	714-539-6354
*Treasurer	Bob Brace	treasurer@pcas.org	714-544-6282
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*Archivist	Gail Cochlin	archivist@pcas.org	714-745-0815
*Programs Co-Chair	Joe Hodulik	programs@pcas.org	949-300-1864
*Programs Co-Chair	Brian Steffensen	programs@pcas.org	714-348-9179
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Scholarship	Megan Galway	scholarship@pcas.org	714-539-6354
Website	Rene Brace	info@pcas.org	714-544-6282

\*PCAS Board Member

## PACIFIC COAST ARCHAEOLOGICAL SOCIETY

### 2018 Calendar Year Membership and Subscription Form

Name(s): \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

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* \_\_\_\_\_

Signature

**Membership** (Includes Quarterly/Newsletter)

- Active Member - \$45
- Family Membership - \$50
- Supporting Member\* - \$55
- Donor Member\* - \$75
- Lifetime Member\* - \$1000

\* May be individual or family membership

**Subscription Only**

- Quarterly* - \$40
- Newsletter* - \$20
- Student Associate - \$10 (email Newsletter only)

**Scholarship Fund**

- Donation \$ \_\_\_\_\_

**Return form with payment to:**

**PCAS Membership  
PO Box 10926  
Costa Mesa, CA 92627-0926**

[www.pcas.org](http://www.pcas.org)