Sacramento Archeological Society, Inc.
*N*ewsletter

www.sacarcheology.org. **May/June - 2016**

UPCOMING EVENTS

May 1, 2016 – Scholarship applications are due
May 4-6, 2016 – Prehistory at Clear Lake Tour
May 4, 2016 – Board Meeting to select scholarship recipients
June 19, 2016, Sunday – "Mysteries of Ancient Orkney and Great Britain", Jan Johansen and Paul K. Davis, Eclectic Archeological Exchange at Carolyn and Gordon McGregor's
June 19, 2016 – Board Meeting at Carolyn and Gordon McGregor's
July 16 to July 24, 2016 (approximate dates) – Paleo-Indian Oregon Tour
September 27- October 12, 2016 (approximate dates) – Utah Rock Art Tour
October 15, 2016 – "Paleo Indian Culture in California", Greg White, Gerrit Fenenga and Rick Fitzgerald, Maidu Museum and Historical Site
December 3, 2016 – Annual Meeting at Carolyn and Gordon McGregor's

Clear Lake Tour

Wednesday, May 4, 2016 to Friday, May 6, 2016

Sacramento Archeological Society is pleased to offer a "prehistory tour" of the Clear Lake area. This tour is a follow up to our "Talking Stone and Sacred Stories" event at the Maidu Museum and Historical Site on November 7, 2015 when we showed the outstanding film, "A Walk through Time: A Story of Anderson Marsh". This tour will take you to sites introduced in the film. We are pleased to have Dino Beltran, Dr. John Parker, Deborah McLear-Gary and Deanna Commons from the Archaeological Conservancy lead the tour.

The itinerary for the tour is as follows:
May 4, 2016, Wednesday:
Presentations at Best Western El Grande Inn, Clearlake, CA
7:00 p.m. Welcome – Dan and John Foster
7:15 p.m. Overview of Lake County Archaeology – John Parker
8:15 p.m. Anderson Marsh – Dino Beltran
8:30 p.m. Borax Lake Site - Deanna Commons
9:00 p.m. Caballo Blanco Biface Cache
9:00 p.m. Instruction for field trip – Dan and John Foster

May 5, 2016, Thursday:
8:00 a.m. Borax Lake Obsidian Source – John Parker
9:00 a.m. Borax Lake Site (One of The Archeological Conservancy properties) – Deanna Commons
1:00 a.m. Anderson Marsh State Park - John Parker and Dino Beltran

May 6, Friday:
8:00 a.m. Mount Konoki Obsidian –Deborah McLear-Gary and John Parker

12:30 p.m. Fetzer Housepit Village Site – Foster and Fenenga
1:00 p.m. Keystone Petroglyph Rock – Dan, Gerrit, Deborah, John
4:00 p.m. Tour ended

Lodging: May 4 and 5th at Best Western El Grande Inn, 15135 Lakeshore Drive, Clearlake, CA 95422 707-994-2000. **Tour Reservations**: Reservations are closed.

Eclectic Archeological Exchange

June 19, 2016, Sunday (Note: this is a revised date from the last newsletter.)
Carolyn & Gordon McGregor's
1334 Mission Ave. Carmichael, CA 95608

In August, 2015 several members of Sacramento Archeological Society, Inc. joined members of the Council for British Archaeology for an archaeological tour of the Scottish Orkney. Orkney has world famous Neolithic villages of Skara Brae and Ness of Brodgar which is currently being excavated, Maeshowe chambered tomb and amazing henge monuments of Brodgar and Stennes – all part of our World Heritage Site. After the Orkney tour the travelers continued to visit archeological sites in Scotland, England and Ireland. Jan Johansen will share Orkney photos and stories. Paul K. Davis will present tidbits from his visit to other archeological/anthropological sites in the Great Britain following the Orkney tour.

An agenda for the event is
1:00 Arrival, socialize, lunch
2:00 "Mysteries of Ancient Orkney" – Jan Johansen
3:00 Break
3:15 "Archeological Sites in Great Britain" – Paul K. Davis
4:15 Informal discussion with additional Orkney tour participants: Jeremy Johansen, Tom Johansen, Ruth McElhinney, and Knuti VanHoven
5:00 Close

Carolyn McGregor is happy to cater the event. She will be serving a light lunch featuring salads, sandwiches, dessert and assorted beverages.

Please put the event on the calendar. To confirm your attendance so that Carolyn prepares the right amount of food, please RSVP Carolyn at sabrina53@earthlink.net.

PAST ARCHEOLOGICAL ACTIVITIES

Our Neandertal Heritage

On Sunday, April 24, 2016 Sacramento Archeological Society, Inc. was pleased to host presentations by **Teresa Steele, PhD, "**Varsche Rivier 003 (South Africa): recent investigations into behavioral variation during the Middle Stone Age and implication for modern human origins" and **Tim Weaver, PhD, "**The Role of History and Chance in Human Evolution". The event at the Yolo County Library, Arthur F. Turner Branch was well attended by over 35 individuals. We want to especially thank Teresa

and Tim for their excellent presentations and Dennis Fenwick for organizing the event and with his wife Marty hosting a get-together after the event.

Teresa Steele, PhD Anthropology UCD reviewed her discoveries excavating a Middle Stone Age (MSA) and Late Stone Age (LSA) site in a non-coastal region of South Africa at Knersulakte in Southern Namaqualand, South Africa. Her work which is on-going is adding another piece to the puzzle of modern human evolution. The ancestors of all living humans evolved in Africa sometime during the Middle (781,000-126,000 years ago) to Late (126,000-11,400 years ago) Pleistocene. At the excavation site near the Varsche River Teresa and company are finding evidence of inhabitation in both MSA (285 to ~40 thousand years ago (kya)) and Late Stone Age (LSA) (starting about 40 kya.). Finds including stone tools (silcrete and heat treated silcrete), ochre, ostrich eggshell water bottles, shell beads, faunal remains, and marine mollusks to name a few. Many of these artifacts favorably compare to Still Bay and Howiesons Poort artifacts, giving a period context. These finds also suggest technical variation in the MSA, developing cultural stratigraphy, and the use of the landscape, such as movement of marine shells inland.

Still Bay and Howiesons Poort are cultural period in the Middle Stone Age in Africa. Howiesons Poort is associated with various archaeological artifacts. The most notable come from composite weapons. These were made from "geometric backed" blades that were hafted together with heated ochre and gum compound glue. These blades are sometimes called segments, crescents, lunates or microliths are the type fossils for identifying a technology as Howiesons Poort. The Howiesons Poort culture also produced symbolic artifacts such as engraved ochre, ostrich eggshells and shell beads. There is a particularly abundant and diverse use of ochre as a pigment and this has been interpreted as reflecting an increasingly complex symbolic culture. (https://en.wikipedia.org/wiki/Howiesons_Poort)

Tim Weaver, PhD Anthropology UCD contrasted the ladder-like and the branching explanations for human evolution. The branching process depicted by a tree is very different from the ladder-like view of the relationships among species common in Darwin's time and still often presented in popular depictions of evolution. Branching means that each species has a unique history—it has taken its own path—which, in turn, allows chance to play a significant role in the outcomes of evolution. Tim suggested that the evolutionary forces of genetic drift could explain the differences between modern humans and our closest relatives, the Neandertals. Specifically he compared brain (skull) shape and size and the shape of the pelvis birth canal. The digital reconstruction of a female pelvis from bone fragments was particularly fascinating. This complex reconstruction showed that Neandertals' pelvic structure was wider side to side than that of modern humans. This suggests that pre-birth rotations of Neanderatals differed from modern humans. Modern humans undergo three pre-birth rotations; whereas only two rotations were necessary for Neandertals. Natural selection seems to explain the difference.

CALENDAR PLANNING

Paleo-Indian Oregon Tour

Planning for a tour of Paleo-Indian sites in Oregon continues but is not yet confirmed. The target time frame for this tour is during the week of **Saturday, July 16 through Sunday, July 24.** Stay tuned for further announcements.

Utah Rock Art Tour

The Sacramento Archeological Society, Inc. is sponsoring a fall 2016 trip to Utah to explore rock art and native American culture. We will visit several of the spectacular rock art sites in **eastern Utah** that illustrate Archaic (Barrier Canyon Style) chronologically followed by Anasazi, Fremont, Formative and Ute. Rock art will be the focus of the tour but we also plan to visit cultural and historic sites, museums, a dinosaur quarry and enjoy the natural beauty of the area.

Horseshoe Canyon

McConkie Ranch

The **target time** frame for this tour is two weeks in late September and early October (i.e. **Tuesday, September 27, 2016 through Tuesday, October 11, 2016.** These dates may change slightly as planning proceeds. You will need to add your travel time to and from Utah. You might also consider visiting other sites in the areas that would not be part of the organized tour for which extra time would be needed. Pick up a copy of one of Polly Schaafsma's books on Utah/Southwest Rock art to prepare.

The Tour is being organized into geographic "clusters" identified by a significant town in the area where we will find lodging. **If you have time constraints, you may pick only the clusters that fit your schedule.** Preliminary target sites are noted for each cluster.

Cluster 1: Vernal and Price, Utah

McConkie Ranch, Utah Field House of Natural History Museum, Dinosaur National Monument, Utah State University Prehistoric Museum, Nine-Mile Canyon

Cluster 2: Green River, Utah

San Rafael Swell and The Shute, Rochester, Buckhorn Wash, Thompson Wash (aka Sego Canyon), John Wesley Powell Museum, Black Dragon, Temple Mountain, Goblin Valley State Park
Option - Horseshoe Canyon/Great Gallery (part of Canyonlands National Park on the west side) The Great Gallery is a "must see" for those serious about Barrier Canyon style rock art.

Cluster 3: Moab, Utah

Arches National Park (Kane Creek), Court House Wash, Dead Horse Point, Canyonlands National Park, State Highway 279 scenic by-way (North and South Bank of Colorado River)

Cluster 4: Blanding, Utah and Cortez, CO

Newspaper Rock, Edge of the Cedars State Park, Huck's Museum
Cortez Cultural Center, Anasazi Heritage Center/Escalante Pueblo
Ute Mountain Tribal Park

Tour Reservations: If you are interested in going on all or part of the tour, put a hold on your calendar, and send **Roger and Lydia Peake** an email at rapeake@att.net that you are interested in the tour.
The tour is for members in good standing with membership dues current for 2016 only.

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MEMBER'S CORNER

Membership

This year we are pleased to welcome 13 new members from several different localities. They are
Deanna Commons, Archaeological Conservancy Archaeologist, Nevada City, CA
Yvonne M Dodson, Placerville, CA
Chris Gralapp, MA, CMI, FAMI, Fairfax, CA
Dr. Paul and Gail Lindfors, North Mankato, MN
Barbara Niepelt, Redwood City, CA
Lisa Pridmore and Randy Redfern, Borrego Springs, CA
Graham and Patricia Steele, Otley, Yorkshire, Scotland
Linda Vittitow, American River College, El Dorado Hills, CA
Astrid and Sam Webb, Borrego Springs, CA

ARCHAEOLOGICAL REFERENCES

"Slaughter at the Bridge"

"About 3200 years ago, two armies clashed at a Tollense River crossing near the Baltic Sea." "When the fighting was through, hundreds lay dead, littering the swampy valley. Some bodies were stripped of their valuables and left bobbing in shallow ponds, others sank to the bottom, protected from plundering by a meter or two of water. Peat slowly settled over the bones. Within centuries, the entire battle was forgotten." This event was not documented until excavations between 2009 and 2015 revealed an undocumented monumental battle in the Bronze Age. (*Science*, V. 351, 2016-3-25, pp. 1384-1389)

"Neandertal genes linked to modern diseases" and "The phenotypic legacy of admixture between modern humans and Neandertals"

"Many modern human genomes retain DNA inherited from interbreeding with archaic hominins, such as Neandertals, yet the influence of this admixture on human traits is largely unknown. Researchers correlated the contribution of common Neandertal DNA variants with electronic health records of ~28,000 adults of Europeans. They discovered and replicated associations of Neandertal alleles with neurological, psychiatric, immunological, and dermatological phenotypes. Neandertal alleles may explain a significant fraction of the variation in risk for depression and relatively benign skin lesions resulting from sun exposure (actinic keratosis). Individual Neandertal alleles were significantly associated with specific human phenotypes, including hypercoagulation and tobacco use. The results establish that archaic admixture influences disease risk in modern humans, provide hypotheses about the effects of hundreds of Neandertal haplotypes, and demonstrate the utility of electronic health record data in evolutionary analyses."

"The Neandertal health legacy isn't entirely negative. Two studies published in *The American Journal of Human Genetics* in January 2016 identified three archaic genes that boost the innate immune response, which helps defend against fungi and parasites as well as bacteria." "As modern humans entered new environments that harbored new pathogens, they took an evolutionary shortcut by picking up beneficial genes from other hominins…Neandertals had at least 200,000 years to adapt to life in the Middle East and Europe before moderns got there." (*Science*, V. 351, 2016-2-12, p. 648-9 & 737-741)

"Modeling Neandertal extinction"

"The extinction Neandertals in Europe is commonly thought to have been the result of competition with modern humans. Gipin *et al*. test this possibility mathematically, with a model that explores the interaction between the level of cultural development and population size. The model confirms that differences in cultural level can lead to competitive exclusion of a larger population by a smaller one. An advantage in learning ability, for example, would ensure that modern humans replace Neandertals, even though the initial discrepancy in population size was large. Although the reality of the Neandertal demise is likely to have been more complex (for example there may have been cultural exchange between Neandertals and modern humans as well as competition), these models affirm the likelihood that cultural sophistication held sway." (*Science,* V. 351, 2016-3-4, p. 1040)

"Excavating Neandertal and Denisovan DNA from the genomes of Melanesian individuals"

"Although Neandertal sequences that persist in the genomes of modern humans have been identified in Eurasian, comparable studies in people whose ancestors hybridized with both Neandertals and Denisovans are lacking. Authors developed an approach to identify DNA inherited from multiple archaic hominin ancestors and applied it to whole-genome sequences from 1532 geographically diverse individuals, including 35 previously unknown Island Melanesian genomes. In aggregate, they recovered 1.34 gigabases and 303 megabases of the Neandertal and Denisovan genome, respectively." "Having demonstrated that the Melanesian individuals have both Neandertal and Devisiovan ancestry", they "used these maps of archaic sequences to show that Neandertal admixture occurred multiple times in different non-African populations, characterize genomic regions that are significantly depleted of archaic sequences and identify signatures of adaptive introgression." (Benjamin Vernot *et al*, *Science,* V. 352, 2016-4-8, p. 235-239)