

Santa Cruz Archaeological Society

Newsletter

11,000 Year Old Seafaring Indian Sites Discovered on California Channel Island

Blake de Pastino, Public Archaeology

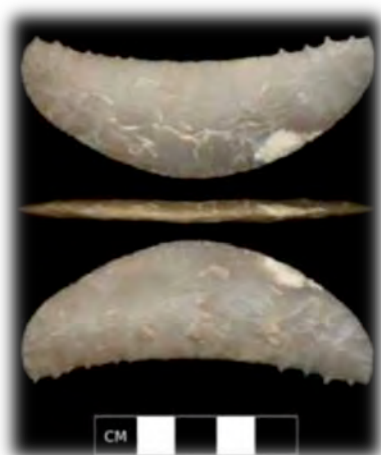
January 6, 2014

Edited for SCAN

Just offshore from the 'chick-a-block' development of Southern California, archaeologists have discovered some of the oldest sites of human occupation on the Pacific Coast. On Santa Rosa Island, one of the Channel Islands just 65 kilometers from Santa Barbara, nearly 20 sites have been found that reveal signs of prehistoric human activity, from massive middens of abalone shells to distinctive stone points and tool-making debris.

At least nine of the sites have what archaeologists say is "definitive evidence" of ancient Paleoindian occupation, about half of them having been dated to 11,000 to 12,000 years ago — making their inhabitants some of the earliest known settlers of North America's West Coast. "Finding these sites and the definitive evidence for early occupation is crucial and tells us that people were there, occupying the landscape at the end of the Pleistocene," said Dr. Torben Rick of the *Smithsonian Institution*, who led the survey that uncovered the sites.

The discovery adds hefty new data to the already mounting evidence that maritime Paleoindians — also known as Paleocoastal peoples — lived along the California coast at the end of the last ice age. Such finds have important implications for the history of human migration, suggesting that at least some of America's earliest settlers moved south from Alaska along the coast, rather than farther inland, where retreating glaciers are thought to have allowed passage to the continent's interior.



Distinctive crescent-shaped stone tools, like this from neighboring San Miguel Island [left, image courtesy University of Oregon], are among the Paleocoastal artifacts that have been identified.

Uncovering hard evidence of this coastal migration has proved challenging, however, because the shorelines that Paleocoastal people would have followed have long since been submerged by rising seas.

But in recent years, surveys of California's modern-day coasts and islands have turned up several prehistoric sites that are still on dry land, farther inland from the now-submerged shores.

....story continues on pages 2 and 3

"11,000 Year Old Seafaring Indian Sites Discovered on California Channel Island" continued...

It was while studying some of these sites on San Miguel Island — another of the Channel Islands — that Rick and his colleagues made a key observation: They noted that Paleocoastal settlements tended to have certain traits in common that made them more suitable than sites right on the water. The earliest sites tended to be 1 to 7 kilometers from where the shoreline used to be, for example, in elevated areas that offered commanding views of the coast and often the island's interior. Optimal locations were also near sources of useful raw materials, like chert for making tools, as well as fresh water and rockshelters or caves for refuge.

With these factors in mind, Rick's team turned to Santa Rosa Island to survey its previously unexplored southwestern coast. The island was already famous as the home of Arlington Man, perhaps the oldest human remains ever found in North America, discovered in 1959 and dated to 13,000 years ago. But the southwestern portion of the island had received little scientific attention, and it fit many of the criteria Rick's team had identified. What's more, it was the steepest part of the island, which meant it had been less susceptible to rising sea levels and more likely to still hold evidence of early sites. Upon surveying the area, the team found 19 sites that showed signs of human occupation, mostly middens, or piles of detritus left over from generations of tool making and food preparation.

Although they were essentially prehistoric trash piles, these middens offered a wealth of useful archaeological clues, some deposits covering more than 75,000 square meters (over 18 acres). Nine of the these sites contained the distinctive Channel Island barbed stone points that are indicative of Paleocoastal culture from the late Ice Age, Rick reported, and several also contained caches of shells from red abalone — a staple food of Paleocoastal Indians. "They probably used boats since they had to get to the island, and they hunted a variety of marine birds, seals and sea lions and collected shellfish," Rick said. "These are all early clues to human life ways at the [late] Pleistocene."

The large amounts of shells, found with stone tools several kilometers from the ancient shoreline, suggest that the shellfish were carried inland to be processed, Rick said.



Surveys of the island's southwestern coast turned up scatterings of stone points, abalone shells, and crescent-shaped tools [photo left, courtesy Torben Rick]. And even more important, the shells — unlike stone — can be radiocarbon dated. All four of the abalone shell middens returned dates from similar ranges, from 10,900 to 12,100 years ago.

Santa Rosa's ancient inhabitants also left behind a number of unusual crescent-shaped tools made of chipped stone, artifacts similar to those found throughout the Great Basin, typically near water, but whose exact purpose, Rick said, was "a topic of debate."

"11,000 Year Old Seafaring Indian Sites Discovered on California Channel Island" continued...

"People have speculated from everything like hunting to even brain surgery — a bizarre 100-year-old idea," he said. "Today, we think they ... would have been used to hunt aquatic birds and possibly other fauna."

One sign absent from any of the newly discovered sites, however, was evidence of construction.

"Unfortunately, there are no clear signs of a structure," Rick said. "We are hoping to go back soon to one of these sites to excavate a larger area, and we hope to find some of this evidence."

The discoveries on Santa Rosa will likely bring more attention to the Channel Islands and Southern California for future research into the early coastal settlement of the Americas, Rick said. But more research at these and other sites is still needed to help clarify the breadth and depth of the first Americans' occupation on the Pacific Coast, he noted.

"Now the important thing to do is excavate some of these sites in detail to see what more we can learn about ancient cultural practices, environmental changes, and other variables," he said. "We of course, want to do other surveys like this to find other contemporary sites. "As excited about these finds as we are, to us they inspire more work." Rick and his team report their findings in recent issue of the ***Journal of Field Archaeology***.



In Memoriam: Deborah Wubben (1923-2013)

Submitted by R. Edwards, SCAS Historian

December 17, 2013

Edited for SCAN

The Society received a sad notice on the death of one of our long term members, Deborah Wubben. Her niece Margaret Weiler wrote "She was a long time member and supporter of your organization." Deborah's membership goes back into the 1970s and she was an active in the Society's actions during the "Scott's Valley incident" of 1982-1983.

Deborah worked in the office of Undergraduate Admissions in the University of California system for thirty-six years, ending her career at UC Santa Cruz in 1980. She lived in the Spring Lakes Mobile Home Park from the 1970s to 2011. Her niece also wrote that Deborah "had a great love for travel, research and genealogy, which she pursued for over 30 years. She will be remembered for her generosity and loyalty to family and friends." Her full obituary can be found in *The Signal*, October 20, 2013. (<http://www.signalscv.com>)

Assessing Ross Parmenter's unpublished biography about Zelia Nuttall and the Recovery of Mexico's Past

Society for American Archaeology, History of Archaeology Interest Group November 2013

Peter Diderich, University of Rostock

Edited for SCAN

In 1926 English novelist D.H. Lawrence, who today is best known for his book *Lady Chatterley's Lover* (1928), published his novel *The Plumed Serpent*. In it Lawrence tells the story of Kate Leslie, a widow of 40, who embarks on a journey travelling through Mexico. Besides the main protagonist Lawrence also describes the character of a 'Mrs. Norris':

She was an archaeologist, and she had studied the Aztec remains for so long, that now some of the black-grey look of the lava rock, and some experience of the Aztec idols, with sharp nose and slightly prominent eyes and an expression of tomb-like mockery, had passed into her face. A lonely daughter of culture, with a strong mind and a dense will, she had browsed all her life on the hard stones of archaeological remains, and at the same time she had retained a strong sense of humanity, and a slightly fantastic humorous vision of her fellow men.

This 'Mrs. Norris' is the literary embodiment of pioneering archaeologist Zelia Nuttall. Prolific author D.H. Lawrence had been a regular visitor to Nuttall's home where he "immersed himself in her library of local mythology, history, and research." With the description of Nuttall's doppelganger Lawrence immortalized her and furthermore exhibits her fame at the time.

Born in 1857, Zelia Magdalena Nuttall was a key figure in Nineteenth Century American Archaeology and Anthropology. She was one of the earliest women archaeologists engaged in the field of Mexican Archaeology. From the 1880s up until the 1930s – a career spanning almost five decades – she was working in the United States, in various countries across all of Europe, in Russia, but foremost in Central America, where she studied and explored Aztec, Maya, Olmec and other cultures.

Throughout her career, Zelia Nuttall attended anthropological and archaeological congresses all over America and Europe, gave far-reaching presentations on her latest findings and discoveries, and engaged in scholarly discussions with the most prominent figures in American Archaeology, such as Franz Boas, Alfred Kroeber, Leopoldo Batres, Eduard Seler, or Frederic Ward Putnam, with whom she kept a long and close friendship. She also was affiliated with many institutions and was well integrated in a vast social network of friends and benefactors.

Her great achievements include uncovering several ancient documents and codices as well as a detailed publication about Sir Francis Drake's travels in the sixteenth century around the globe and the Spanish Chroniclers in Mexico. Apart from Classical Archaeology, Nuttall also made valuable achievements in Archaeoastronomy, mainly her historical analyses of the ancient Mexican calendar system. In her later years, until her death in 1933, she worked and published in the fields of Archaeo- and Ethnobotany. Toward the end of her career she also trained well-known Manuel Gamio who "was to become one of Mexico's famous archaeologists and the first to use modern scientific methods."

“Assessing Ross Parmenter’s unpublished biography about Zelia Nuttall and the Recovery of Mexico’s Past” continued...

In view of the fact that women “have played a major role in the history of American Archaeology though their contributions often are overlooked and undervalued,” consequentially up to today there has been no major publication concerning pioneering Zelia Nuttall.

Ross Parmenter, who was a renowned music critic for the *New York Times*, author of multiple books and reputed to have been “a meticulous researcher and a true gentleman,” had a keen interest in Mexico and its history. Shortly before he finished his book about the French explorer Alphonse Pinart in the 1960s, he developed interest in the life and work of Pinart’s wife, Zelia Nuttall.

In contrast to most studies that had “focused on the second generations of women archaeologists – women born early in the twentieth century who launched their careers in the inter-war years, the 1920s and 1930s,” Parmenter put in the center of his attention one of the earliest American woman archaeologists who belongs to the first generation. With the biography Parmenter accomplished a vast and important manuscript, a detailed biographical reconstruction (over 1,500 pages), entitled *Zelia Nuttall and the Recovery of Mexico’s Past*.



The manuscript itself is not only a mere narrative about Zelia Nuttall as an important figure in Archaeology and Anthropology at the end of the Nineteenth and beginning of the Twentieth Century. This manuscript is also a reflection on the archaeological scene at the turn of the century. In that regard Ross Parmenter succeeded in piecing together many details into a broad narration about the institutionalization and professionalization of American Archaeology and Anthropology at this time.

Nuttall began her professional academic work at a time of gradual change for women in Victorian society in regard to tertiary education. Before the 1880s women were usually excluded from universities and academic societies and the first women with training equal to their male colleagues in universities appeared in the 1880s. Interestingly, despite being a renowned archaeologist, member of many institutions and societies, Nuttall on the other hand never studied or possessed a university degree throughout her life.

Towards the end of her career Nuttall experienced more and more alienation from other researchers and scientists at the time. Parmenter partly explains this with her exceptionally long career, outliving most of her early colleagues and important benefactors. Furthermore, as already mentioned, she experienced increasing financial difficulties, e.g. paying for her house, Casa Alvarado, expeditions or publications.

As Alfred M. Tozzer put it in Zelia Nuttall’s obituary, she “had a vivid personality and was the very last of the great pioneers of Mexican archaeology.” It is Ross Parmenter’s achievement to employ this vividness into his detailed biography as well as capturing the complicated streams during the process of institutionalization of Anthropology.

8,000 Year Old Artifacts Unearthed in Minnesota

Mark W. Olson for the Chaska Herald

December 26, 2013

Edited for SCAN

Local archaeological work is continuing to turn up rare artifacts and shed light on the Minnesota River Valley's earliest residents. For the past several weeks, archaeologists have been busy excavating ancient campsites along County Road 61 in Chanhassen, near the Highway 101 Bridge. They've discovered about 2,000 artifacts, including bison bones, the remains of an 8,000 year old fire hearth, and a rare spear point also dating back 8,000 years.



The site is important because there are few 8,000 year old sites in Minnesota that are so well preserved," stated Frank Florin, with Florin Cultural Resource Services LLC, which is conducting the work. "The variety of artifacts from the site provides valuable information to help us understand ancient history, how people lived, and the environment at that time."

The workers are racing against time. Next June, construction is scheduled to begin on a new, flood-resistant, \$54 million Highway 101 bridge, connecting Carver and Scott counties [image left courtesy Mark W. Olson].

As part of a federally mandated process, Florin's crews conducted an archaeological survey of the future construction area. During these test digs, workers found butchered animal bones and a range of tools, such as hide scrapers, cutting tools, grinding stones, hammer stones and a graver.

So Florin's crews returned this winter for a process called "data recovery," which means collecting artifacts and site information before it is destroyed by construction.

ARCHAIC

Florin's team, which includes twelve archaeologists, is excavating seven locations near the County Road 61 and Highway 101 intersection. The total cost of the archaeological project is \$290,000, according to Lyndon Robjent, public works director for Carver County, Minnesota.

"The site has several occupations that span from 8,000 to 3,000 years ago," Florin said. The recovered artifacts paint a picture of what is called the "Archaic Period," which lasted from about 6,000 to 800 B.C.

"8,000 Year Old Artifacts Unearthed in Minnesota" continued....

Artifacts from this time have been found in Minnesota before. However, they are rarely found in an intact setting, where scientists can study their context. Of the handful of discovered Archaic Period sites most are found by construction projects, said State Archaeologist Scott Anfinson in an interview last summer. He said there are similar sites in Granite Falls and New Ulm. The Minnesota River Valley "truly is a time capsule and it's a time capsule that hasn't been dug up yet," Anfinson said.

The Chanhassen sites have yielded evidence of areas where animals were butchered. Animal remains discovered include bison, fish, turtle and clams. The archaeologists have also found "lithic workshops" where tools were made, as evidenced by chipping debris.

The type of 8,000 year old spear point is uncommon in Minnesota, and found more frequently in the southeastern United States, Florin said. Evidence of the 8,000 year old campfire came in the form of "a dark circular stain that formed from decomposed charcoal, along with cracked rocks," Florin said. It was found in an area with animal bones and chipping debris.



Image courtesy *Minnesota CBSLocal.com*

DEEP SITE

The campsites that yielded the artifacts would have stood near a large lake in the bottom of the Minnesota River Valley, Florin said. After the artifacts were deposited, a dry climate was followed by increased precipitation and cooler temperatures. The lake basin expanded, filling the site with wetlands and resulting

"8,000 Year Old Artifacts Unearthed in Minnesota" continued....

in peat deposits that covered the artifacts. When settlers began clearing and farming the land 150 years ago, more soil was deposited on the site.

"This site is unique in that it is very old and buried over 10 feet deep in some places," Florin said. "Also it is unusual to find sites in wetlands. However, the wetland formed after the site was occupied. So part of our job is to understand the past landscape and setting."

CHALLENGES



The cold, wet conditions pose particular challenges to the archaeologists. Because the wetland excavation site continually fills with water, it is pumped out every morning, and then every hour [image left, Mark W. Olson, *Chaska Herald*]. The workers, sometimes wading through water and mud in subzero temperatures, wear thick clothing. To keep the site from freezing, insulation is placed over the ground, and then removed while the soil is slowly skimmed with a shovel.

Small heated plastic tents are set up at the site, where workers push the thick clay soil through a screen, searching for artifacts. The process resembles kneading bread or giving a deep-tissue massage. Each artifact is labeled and placed in a plastic freezer bag. "Work will wrap up shortly this season, with one more area to excavate in the spring," according to Florin.

WHAT THEY TELL US

However, the excavation is only the first step, then comes the analyzing. "We clean artifacts with water and soft brush and then study them to see what they can tell us," Florin said.

"For bones, we determine the type of animal (bison, fish, turtle) and portion of the animal (vertebra, tooth, femur) and also note if the bone is burned or has butchering marks. Many of the bones are burned, indicating they were discarded in a fire hearth," Florin said. "For stone artifacts we identify the type of material (chert, basalt, quartz, etc.) and where it came from. Some stones are available in the local area, while others come from more distant areas such as Dakotas, Iowa, and Wisconsin."

"This site provides a well-preserved record of how people lived, although it is only a partial record, as soft organic materials like wooden artifacts, woven plant fibers, and hides would have decayed over time, while stones and animal bones are the primary materials that have survived," Florin said. These artifacts will ultimately be housed at the Minnesota Historical Society.

"It is exciting to see first-hand how people lived thousands of years ago ... and to hold artifacts that were made thousands of years ago," Florin said. "I feel a connection with people and to a way of life that has largely disappeared in this industrial and technological age, where we are increasingly disconnected from nature."



UPCOMING GENERAL MEETING

All General Meetings are held at the historic Sesnon House on the campus of Cabrillo College, located at 6500 Soquel Drive, Aptos, CA and begin promptly at 7:30 PM.

Thursday February 20, 2014

Charles' Corner and Post-Emancipation Community Building in Tidewater Virginia by Dr. Shannon Mahoney.

After the Civil War, African American families settled in an area on Virginia's Lower Peninsula that came to be known as Charles' Corner. Over the course of the next fifty years, residents developed substantial homesteads and achieved a significant degree of economic stability, providing an alternative to the sharecropping and tenancy narratives commonly associated with the post-bellum South. In 1918, Charles' Corner families were forced to relocate after the land was commandeered by presidential proclamation in order to create a naval facility on the York River. Although the Navy demolished the superstructures almost immediately, the secure environment and lack of development on the property preserved the homesteads as archaeological sites that encapsulate a precarious and poorly-understood period of African American history. Charles' Corner provides the opportunity to assess the process of community building for African Americans after Emancipation through the application of data from the archaeological record, historical documents, and oral histories.

Dr. Shannon S. Mahoney is an Associate Archaeologist at ASM Affiliates in Reno, Nevada. She started her career as an archaeologist in Santa Cruz after receiving an A.S. in Archaeology at Cabrillo College and a B.A. in Anthropology at University of California, Santa Cruz. The Santa Cruz Archaeological Society (SCAS) provided a valuable connection to California Archaeology while she was attending graduate school in Virginia: in 2008, SCAS provided her with funding to complete the fieldwork for her dissertation entitled "Community Building After Emancipation: An Anthropological Study of Charles' Corner, Virginia, 1862-1922." She is honored to present her dissertation work to the Society and would like to thank SCAS members for their support.



Attention SCAS Members:

Have a question about membership? Want to contribute an article for the Newsletter? Interested in Volunteering or even becoming a SCAS Board Member?

Check out our webpage at <http://www.santacruzarchsociety.org> to contact our Board Members who are ready and willing to answer your questions and queries.

We look forward to hearing from you and what you would like to see for the future of SCAS. Your opinion matters because without you there is no Society!

Cat Domestication in China 5,300 Years Ago

Popular Archaeology

December 16, 2013

Edited for SCAN



A study conducted by researchers at the **Chinese Academy of Sciences** has produced the first direct evidence for the processes of cat domestication. The image to the left is the Near Eastern Wildcat, native to Western Asia and Africa, and considered the primary ancestor of all domestic cats now living around the globe [image courtesy *Wikimedia Commons*].

Led by Yaowu Hu, he and his colleagues analyzed eight bones from at least two wild cats excavated from the site of the ancient Chinese village of *Quanhucun*, using radiocarbon dating and isotopic analyses of carbon and nitrogen traces in the bones of the cats. The analysis showed that the cats were preying on animals that lived on farmed millet -- probably rodents. Archaeological evidence indicated that the village farmers had problems with rodents in the grain stores. In essence, the cats and the villagers had developed a kind of symbiotic relationship.

"Results of this study show that the village of *Quanhucun* was a source of food for the cats 5,300 years ago, and the relationship between humans and cats was commensal, or advantageous for the cats," said study co-author Fiona Marshall, PhD, a professor of archaeology in Arts & Sciences at **Washington University in St. Louis**. "Even if these cats were not yet domesticated, our evidence confirms that they lived in close proximity to farmers, and that the relationship had mutual benefits."

While it often has been argued that cats were attracted to rodents and other food in early farming villages and domesticated themselves, until now, there has been little evidence for this theory.

Other clues gleaned from the *Quanhucun* food web suggest the relationship between cats and humans had begun to grow closer. One of the cats was aged, showing that it survived well in the village. Another ate fewer animals and more millet than expected, suggesting that it scavenged human food or was fed.

Cat remains rarely are found in ancient archaeological sites, and little is known about how they were domesticated. Cats were thought to have first been domesticated in ancient Egypt where they were kept some 4,000 years ago, but more recent research suggests close relations with humans may have occurred much earlier, including the discovery of a wild cat buried with a human nearly 10,000 years ago in Cyprus.

Recent DNA studies suggest that most of the estimated 600 million domestic cats now living around the globe are descendants most directly of the Near Eastern Wildcat, one of the five *Felis sylvestris lybica* wildcat subspecies still found around the Old World.

"Cat Domestication in China 5,300 Years Ago" continued....

Marshall, an expert on animal domestication, said there currently is no DNA evidence to show whether the cats found at *Quanhucun* are descendants of the Near Eastern Wildcat, a subspecies not native to the area. If the *Quanhucun* cats turn out to be close descendants of the Near Eastern strain, it would suggest they were domesticated elsewhere and later introduced to the region.



Above: Field specimens from the site of Quanhucun showing key body parts and the presence of an aged animal with worn dentition. (A) Left mandible with worn fourth premolar and first molar; (B) right humerus; (C) left pelvis; (D) left tibia [image courtesy PNAS].

"We do not yet know whether these cats came to China from the Near East, whether they interbred with Chinese wild-cat species, or even whether cats from China played a previously unsuspected role in domestication," Marshall said.

This question is now being pursued by researchers based in China and in France. Details of the study have been published in the early online publication, [PNAS](#) (*Proceedings of the National Academy of Sciences*) during the week of December 16, 2013.

Other members of the research team included Xianglong Chen, Changsui Wang and Liangliang Hou, all affiliated with the ***Chinese Academy of Sciences' Key Laboratory of Vertebrate Evolution and Human Origins and the Institute of Vertebrate Paleontology and Paleoanthropology***; Songmei Hu, of the Archaeological Research Institute of Shaanxi Province, Xi'an, China; and Xiaohong Wu, of the ***Department of Archaeology, Peking University, in Beijing***.

Santa Cruz Archaeological Society
P.O. Box 85
Soquel, CA 95073



Join us in our efforts to study and
preserve the Past for the Future...

☐ Individual \$20 ☐ Students \$15 ☐ Seniors \$15 ☐ Family \$25
☐ Lifetime \$400 ☐ Institution \$25

☐ New Member ☐ Renewal ☐ Gift Membership (from) _____

Name: _____

Street Address / Apt. #: _____

City, State, ZIP: _____

Email Address: _____

Phone: _____

Please share any archaeological interests or experience:

I would prefer to receive the SCAS Newsletter by: ☐ post mail ☐ email ☐ both

Mail completed application with dues to:

SCAS Membership
P.O. Box 85
Soquel, CA 95073