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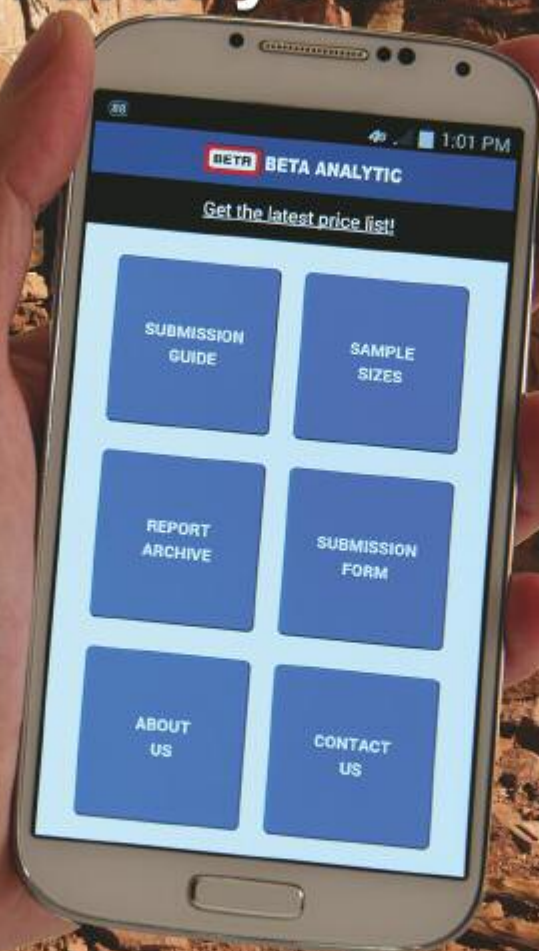
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Archaeology in Patagonia



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the SAA Archaeological record

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MAY 2015

Editor's Corner	2	Anna Marie Prentiss
Letter to the Editor	3	
Volunteer Profile: Barbara Arroyo	4	

NEW TOPICS IN PATAGONIAN ARCHAEOLOGY

New Topics in Patagonian Archaeology	5	Luis Alberto Borrero and Nora Viviana Franco
Human Occupation of the North Patagonian Coast (San Matías Gulf): Current Perspectives	8	Florencia M. Borella, Marcelo Cardillo, and Cristián M. Favier Dubois
Archaeological Evidence for Hunter-Gatherer Mobility and Diet Changes during the Eighteenth and Nineteenth Centuries in the Central Patagonian Atlantic Coast	12	Julieta Gómez Otero and J. Eduardo Moreno
New Approaches to the Study of Hunter-Gatherers of the North Coast of Santa Cruz (Argentina): The Use of Rockshelters	16	Pablo Ambrústolo and Miguel Ángel Zubimendi
Archaeology Near the Southern Ice-End: Current Advances in Human Interdisciplinary Research in Central Western Patagonia	21	César Méndez and Omar Reyes
Mobility and Human Interaction in Southern Patagonia	27	Nora Viviana Franco and Luis Alberto Borrero
Patagonian Archipelago and Tierra Del Fuego Islands: Recent Archaeology, Research Focus, and Strategies	32	Manuel San Román Bontes, Jimena Torres Elgueta, and Flavia Morello Repetto

REPORT FROM THE SAA BOARD OF DIRECTORS	36	Patricia A. Gilman
--	----	--------------------

SOCIETY FOR AMERICAN ARCHAEOLOGY	40	
----------------------------------	----	--

80TH ANNUAL BUSINESS MEETING		
------------------------------	--	--

2015 AWARDS	45	
-------------	----	--

In Memoriam: Larry Delmar Agenbroad	54	E. Steve Cassells
-------------------------------------	----	-------------------

NEWS & NOTES	55	
--------------	----	--

CALENDAR	55	
----------	----	--

On the cover: A shell midden in the coastal zone—Figure 2 from the article "New Approaches to the Study of Hunter-Gatherers of the North Coast of Santa Cruz (Argentina): The Use of Rockshelters."



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EDITOR'S CORNER

Anna Marie Prentiss

Anna Marie Prentiss is Professor in the Department of Anthropology at The University of Montana.

It has been called “the uttermost end of the earth” (McEwan 1997). Patagonia evokes images of remote windswept plains, forests of storm-battered *Nothofagus* trees, massive ice fields, and the towering southern Andes. Early European explorers described it as a land of giants, and during the nineteenth century, rumors were rampant that *Mylodon* (giant ground sloths) still haunted the caves and forests. But a host of very real indigenous peoples also lived in Patagonia, now identified as the Gununa'kena and Aónikenk of open grasslands and the Selk'nam, Haush, Kaweskar, and Chonos of the southern and western coastal zones. The archaeological record of these people and their ancient ancestors illustrates a complex history of variability in survival strategies, population movements, sociality, and entanglements with their indigenous neighbors to the north and later, newcomers from Europe.

Guest editors Luis Alberto Borrero and Nora Viviana Franco have developed a set of articles for this special issue that illustrates some of the exciting research trends in Patagonian archaeology as conducted by Argentinian and Chilean scholars and their colleagues. Borella and colleagues introduce the archaeology of the North Patagonian Coast in which they point to very early exploitation of marine resources and the potential for developing greater understanding of change over time. Otero and Moreno discuss shifts in mobility and diet by indigenous groups during the eighteenth and nineteenth centuries on the Central Patagonian Coast, and the existence of a “horse period,” similar to that of some areas in North America. Ambrústolo and Zubimendi introduce their study of stratified rockshelters on the North Coast of Santa Cruz, Argentina, delivering exciting new insights into ancient land-use tactics. Méndez and Reyes provide an overview of archaeological research in the Chilean region of Aisén, a topographically and ecologically diverse land of deep valleys and glaciated montane terrain located within the southern Andes. Franco and Borrero discuss their study of mobility and human interaction in Southern Patagonia, a region critical for Patagonian hunter-gatherer studies today, and illustrate the importance of integrated faunal analysis and lithic technological studies. Finally, San Román Bontes and colleagues examine the complex relationship between shifting sea levels, regional geomorphology, climate, and human history in the Patagonian Archipelago and Tierra del Fuego islands.

Last but not least, the SAA held its largest meeting last month in San Francisco. This issue includes the Report from the SAA Board of Directors and Minutes from the 80th Annual Business Meeting that includes our annual review of awards (congratulations!). Hope everyone has a great summer (or winter if in the southern hemisphere)!

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1997 *Patagonia: Natural History, Prehistory, and Ethnography at the Uttermost End of the Earth*. Princeton University Press, Princeton, NJ.

The lead paragraph of the lead article of *The SAA Archaeological Record* special issue on repatriation (Gonzalez and Marek-Martinez 2015:11) appears to endorse a frequently stated—but still mistaken—view that SAA opposed NAGPRA. According to the article, “When the Native American Graves Protection and Repatriation Act (NAGPRA) was passed in 1990, the Society for American Archaeology (SAA) registered its apprehension of the membership over the impact of repatriation upon archaeological research. Initial predictions held that the legislation was detrimental to the interests of science.” In fact, SAA worked intensively with the relevant House and Senate committees to shape a bill that balanced scientific and traditional interests. As NAGPRA neared passage, SAA representatives met with our counterpart in the Native American Rights Fund (NARF) and the Association on American Indian Affairs (AAIA) and developed a lengthy set of joint recommendations for changes in the bill, most of which—including the final statutory definition of “cultural affiliation”—were incorporated into NAGPRA. With those revisions, SAA endorsed the bill in a letter (Association on American Indian Affairs et al. 1990) to the House Interior Committee, signed by SAA, NARF, AAIA, and the National Congress of American Indians (NCAI). With NAGPRA’s passage in Congress, SAA, together with NARF, AAIA, NCAI, and other organizations, wrote to President Bush urging him to sign the bill (American Anthropological Association et al. 1990). What the Society, in fact, “registered” when NAGPRA passed was stated in that letter:

The Native American Grave Protection and Repatriation Act is a vital piece of legislation that is the product of a carefully constructed compromise which has earned the support of the Indian, museum, scientific and historic preservation communities.

We believe that the bill will create a workable framework fostering sensitivity and cooperation in achieving the appropriate repatriation of Native American human remains and cultural objects. As representatives of these diverse organizations, we strongly urge you to sign H.R. 5237.

From that time and for many years thereafter, SAA worked consistently to achieve a workable balance between scientific and traditional interests in the past, grounded in NAGPRA and the Society’s 1986 policy that recognizes the legitimate need for repatriation. As we well know, history has consequences. It is important that we get our own institutional history right (see Lovis et al. 2004 for a more detailed account).

KEITH W. KINTIGH

Kintigh is a former President of SAA. He chaired the SAA Task Force on Repatriation (the predecessor of the Committee on Repatriation) during the time of NAGPRA’s passage and later chaired and served on the Committee on Repatriation. As an SAA Board member, he helped write the 1986 SAA repatriation policy.

VINCAS P. STEPONAITIS

Steponaitis is also a former President of SAA. He served on the SAA Task Force on Repatriation and later on the Committee on Repatriation, and was appointed by the Secretary of the Interior to the NAGPRA Review Committee from 2004 to 2008.

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VOLUNTEER PROFILE:

Barbara Arroyo

I became a member of the Society for American Archaeology in 1989. At the time, I was just starting graduate school in the United States and a group of friends decided to drive from Nashville to Atlanta. The short trip was easy; we all got together and helped pay for gas. When we arrived in Atlanta, I began to appreciate the value of becoming an SAA member. I met many colleagues with whom I still keep in touch and with whom I have collaborated on many occasions.

Since 1989, I have tried to attend as many annual meetings as possible. However, it was in 2000 that I became actively involved as a member of the Committee on the Americas (COA) and then, after four years, joined the advisor list. This committee makes recommendations to the Board concerning ways to enhance SAA's effectiveness in its international dimensions throughout the Americas. For this, COA helps to facilitate interaction between colleagues of the Americas through dialogue, conferences, exchanges, and other initiatives. I learned many things about SAA through my volunteer service on this committee. In 2001, with COA's support, I organized a symposium on the practice of archaeology in Central America, inviting various officials from Central American countries. A fundraising campaign was carried out and we were able to bring colleagues from Guatemala, Belize, El Salvador, Honduras, Costa Rica, and Panama. It was an excellent opportunity to open a dialogue on the requirements and problems involved in carrying out archaeological research in the various countries. As a result of that symposium, a couple of papers and a synthesis of the practice of archaeology in Central America were published in 2008 in the Guatemalan journal *Utz'ib*.

Continuing my volunteer experience, I ran for a position on the SAA Board in 2008 and was fortunate to win, serving as an SAA board member from 2008 to 2011. In 2010, all Board members participated in a strategic meeting on the occasion of SAA's 75th



anniversary to reflect on various important issues for the future. Many important initiatives came out of this meeting, one of them being the organization of the *Conferencia Intercontinental*. This conference would take place as part of a concerted effort to engage Latin American archaeologists more fully in the life of the Society and to bring the SAA to Latin America.

The first of these conferences was organized by Dan Sandweiss, Tomas Mendizabal, and myself in Panama in 2012. Many colleagues came to Panama and met for two days, presenting results of research focused on global themes. A digital publication of some of the presentations will soon be available on the SAA website. These will be a small sample of the variety of the papers presented and the diverse research being carried out throughout the Americas.

After the success of the first *Conferencia*, the SAA Board approved a motion to organize the *Segunda Conferencia Intercontinental* in Lima, Peru, in 2014. This conference, organized by Luis Jaime Castillo and myself, focused on continuing to bridge the practice of archaeology on the continent. Organizing this meeting was an intense and rewarding experience. Both the first and the second *Conferencia* were spaces for dialogue between colleagues that occurred within the context of the actual meeting. They were also opportunities for establishing collaborative relationships with archaeologists across borders.

My volunteer experience as an SAA Board member and as an organizer of symposia, conferences, and publications has given me the opportunity to grow professionally and to establish an extensive network of colleagues—a network I began to build beginning with my attendance at my first annual meeting in Atlanta in 1989. I have learned that, as professionals, we have an obligation to serve our profession. Volunteering with the SAA is an excellent way to do so.

NEW TOPICS IN PATAGONIAN ARCHAEOLOGY

Luis Alberto Borrero and Nora Viviana Franco

Luis Alberto Borrero (laborrero2003@yahoo.com) and Nora Viviana Franco (nvfranco2008@gmail.com) are Ph.D. researchers at the Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET, IMHICIHU) and professors at the Universidad de Buenos Aires, Argentina.

The archaeology of Patagonia attracts the imagination of everybody, including people who never set foot there. Not only is it the land of the legendary giants described by European travelers starting in the sixteenth century, but it is also the southern extreme of the last continent populated by *Homo sapiens*, excepting Antarctica. Since Patagonia is located so far south, it is logical to assume that it was the last portion of the continent to be populated. This is probably true irrespective of the location of the entry route, be it the Bering Strait, the North Pacific, or even the North Atlantic. The chronology of the first peopling of Patagonia indicates that the human colonization of America is much older.

Patagonia is a vast territory, extending today over more than 1,000,000 km², its cultural geography dominated by a contrast between the Andean mountains in the West and the vast steppes in the East. In the southwestern portion of Patagonia, this contrast is made even more marked by the presence of an extended archipelagic system. Annual precipitation varies from > 5000 mm/year in the west to ca. 200 mm/year in the east, suggesting the importance of water in such an environment. The steppes, which are the dominant habitat of Patagonia, display variation in the proportion of shrubs and grasses, but are similarly inhabited by guanacos (*Lama guanicoe*). The forest offers a more limited set of resources, with the huemul (*Hippocamelus bisulcus*) being the most important animal. The southwestern channels are dominated by a marine fauna of whales, pinnipeds, birds, and mollusks. This environment has provided different opportunities for hunter-gatherers, and we know nowadays that, in an ideal transect from east to west, dependence on water for human settlement is less and less marked, and other factors become important instead. Guanaco has always been the main prey for hunter-gatherers, who have taken advantage of its territoriality and short seasonal movements. In addition, there is little evidence of use of the huemul and of choique (*Pterocnemia pennata*), a large flightless bird,

which in ethnohistorical times was hunted with “bolas.” The use of maritime resources is well known in the southwestern margins.

Knowledge of early human occupations was generated early in the twentieth century, when Junius Bird of the American Museum of Natural History, New York, published the results of his excavations at the Pali Aike Lava Field, particularly at Fell Cave. Clear evidence associating extinct fauna, mainly ground sloth and horse, with human evidence, including hearths, projectile points, and discoidal stones, was discussed. Once Willard Libby introduced the radiocarbon dating technique, it became possible to date these occupations to the Late Pleistocene. Recent developments in Patagonian archaeology minimally changed the general panorama presented by Bird (1988). New sites were excavated and published, and refinements in chronology and studies of bones and lithics were introduced, confirming the age and quality of the original information. We learned that it is difficult to explain the presence of *Mylodon* bones as a result of hunting tactics and that scavenging is a more realistic alternative. We also know that Tierra del Fuego was populated by humans before it became an island and that the western coast of Continental Patagonia was occupied more or less at the same time as Pali Aike and other early sites in the plateaus in the north of the province of Santa Cruz. This body of information indicates that the process of peopling is much older than usually assumed. Effectively, more time is required to understand the redundant chronological signal older than 10,000 radiocarbon years present in different habitats of the southern continent and Tierra del Fuego. Evidence from south-central Chile, at the Monte Verde site, provides further confirmation for an older presence of humans at least some 2000 radiocarbon years before.

Junius Bird was the most influential archaeologist working in south Chile, inaugurating a research tradition that, since the 1970s, has been in the hands of the Instituto de la Patag-

onia. In Argentina, early interest was focused on the finding of old sites and the construction of cultural sequences, mainly under the influence of the *Kulturkreiss* school. This interest changed through time, mostly through the influence of New Archaeology and, lately, under the impact of ecological schools of thought that reached Argentina through a new generation of researchers who were professors at the Universities of Buenos Aires and La Plata. Under their influence, which was especially strong in the Pampas and Patagonia, old periodizations were reviewed and discussed, and sites began to be understood in relation to changing environments. Recently, multidisciplinary projects have developed, incorporating young generations of archaeologists and involving the formulation of explicit research questions, generally involving an ecological focus. This change was in part the result not only of increased access to the literature and participation—in many cases, through personal funding—in international Congresses, but also of the important exchange of ideas regularly taking place at the “Jornadas de Patagonia,” a regular meeting of Patagonian archaeologists that was initiated in 1984. Recent projects involving researchers from both sides of Patagonia—Chile and Argentina—are well underway, improving our understanding of the archaeology of a land whose frontiers were not those that are separating both countries today.

Main Interests in Patagonian Archaeology Today

The focus of this issue is on recent developments, of which, because of space constraints, only a few could be included. For this reason, we would like to mention some of the research interests and methodologies used.

In the case of the initial peopling, interest has shifted from a search for the oldest occupations to an effort to understand the processes and reasons behind the human selection of places for installation (e.g., Borrero and Franco 1997; Salemme and Miotti 2008). Because large portions of Patagonia are characterized by an arid climate, not moderated by maritime air masses from the Atlantic and Pacific oceans, water would have been an important consideration and probably a major constraint on human settlement. Discontinuities in the cultural histories of some regions may have been a result of this factor.

The continental masses of Patagonia extended to the east in the past when the sea level was much lower, which would make it very difficult to find the earliest traces of human occupation. In fact, although the first evidence of the peopling of Patagonia traces to ca. 11,500 years B.P., early dates at the coast are only around 7400 years B.P. The connection

between the continent and Tierra del Fuego was cut off during the beginning of the Holocene, resulting in the relative isolation of human groups, who had reached Tierra del Fuego as pedestrian hunter-gatherers (McCulloch and Morello 2009). The Tres Arroyos 1 site is the only testimony of this early occupation on the island (Massone 2004). As part of this peopling process, on both the continent and the island, the relationship between hunter-gatherers and extinct mega-mammals has been addressed and we now know that they were not an important resource for the early inhabitants, whose diet was dominated by camelids (Borrero and Martin 2012). The later history of human occupation in Patagonia is one of increasing expansion to new environments and cultural divergence. Early during the Holocene, the forest belt near the Andean Cordillera began to be inhabited, at least on a seasonal basis. Isotopic studies on human bones, most of them found at the hinterland, showed the relative importance of coastal resources in the diet (Barberena 2002). This geographic diversification is accompanied by increasing changes in diet, tools, and settlement, to the point that truly different adaptations developed. Changes in demography indicate that many of the populations inhabiting the different regions interacted extensively. Some of the best known interactions indicate the circulation of lithic raw materials, while evidence of circulation of subsistence items is less important.

At the time of European contact, the panorama was one of extreme cultural diversity. At least two human phenotypes are known to be in existence, short individuals inhabiting the southwestern archipelagos, usually referred to as Fuegians—Yahgan and Kaweskar—and taller individuals inhabiting the eastern steppes, known as Aonikenk in the continent and Selknam in the island of Tierra del Fuego. Real and assumed differences were used to characterize these extremes, but in the end there is also plenty in common. It remains true that a simple divergent scheme accommodates most of this variation.

Nowadays, important areas in Patagonia remain to be archaeologically explored and analyzed. We hope that new generations of researchers and better funding will bring substantial improvements to our knowledge of Patagonia. This issue offers recent archaeological results obtained in different places in Patagonia. It is not an exhaustive coverage, but we believe that it indicates the main research lines that are being pursued.

A synthesis of recent results obtained in the northern coasts of Atlantic Patagonia is presented by Borella and co-authors. Their study not only successfully tackles an understudied

region, but also provides surprising results, like the intensive use of marine resources starting in the Middle Holocene.

Gómez Otero and Moreno analyze changes in the use of the central coast of Patagonia between pre-equestrian and equestrian times. Although the coast was intensively used before the adoption of the horse, later evidence of its utilization is scarce. After analyzing plausible reasons for this change, the authors suggest that it may be related to horse ecology and requirements (i.e., water), and to the reduction of prey acquisition costs.

Ambrústolo and Zubimendi's paper analyzes the use of rockshelters located near the Atlantic coast of central Patagonia during the Middle and Late Holocene. This is interesting because previous research was focused only on shell middens. Available results have provided the earliest evidence of occupation for this area and also shed light on the use of maritime resources, suggesting the complementary use of rockshelters and coastal dunes.

Méndez and Reyes analyze the archaeological record in two bioclimatic areas in Aisén, south-central Patagonia. The study of the distribution, characteristics, and chronology of those records, as well as isotopic and geochemical information, allows them to suggest that the areas correspond to two major human groups, with no evidence of interaction in spite of their relative proximity.

Our own contribution summarizes some of the results obtained at the classic areas of the Chico-Santa Cruz basins, Última Esperanza and Pali Aike, comprising not only the earliest evidences for the colonization of southern Patagonia but also some divergent trajectories.

The paper by San Román et al. presents the basic cultural trajectories identified in the southwestern channels, where maritime adaptations were dominant. They identify the existence of cultural discontinuity and, for that reason, they suggest that the cultural sequence is more complex than previously assumed.

What this short list of papers shows is that the archaeology of Patagonia is still in the process of documenting the limits of its variation.

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HUMAN OCCUPATION OF THE NORTH PATAGONIAN COAST (SAN MATÍAS GULF)

CURRENT PERSPECTIVES

Florencia M. Borella, Marcelo Cardillo, and Cristián M. Favier Dubois

Florencia Borella (fborella@soc.unicen.edu.ar) and Cristián M. Favier Dubois (cfavier3@gmail.com) are researchers at the Consejo Nacional de Investigaciones Científicas y Técnicas-INCUBA, UNICEN, Buenos Aires, Argentina. Marcelo Cardillo (marcelo.cardillo@gmail.com) is a researcher at the Consejo Nacional de Investigaciones Científicas y Técnicas-IMHICHU-Universidad de Buenos Aires, Argentina.

The North Atlantic Patagonian Coast (San Matías Gulf [SMG], Río Negro, Argentina) is known for its archaeological richness covering some 380 km of the littoral (Figure 1). This region shows evidence of early human adaptation to marine resource exploitation. This was the focus of early studies undertaken by Dr. Bórmida in 1961 and 1966, within the framework of the Vienna Culture-Historical School. These studies described mainly surface lithic material; these were then employed in defining “industries” and subsequently used to characterize the prehistoric groups in the area across successive phases over a period of some 6,000 years.

Nevertheless, these pioneering archaeological studies along the Río Negro coast were discontinued in the following four decades. This then created an information vacuum concerning the archaeology of this region that lasted until 2004. In that year, we undertook new studies into the area, focusing on several research strands: distributional and lithic studies, paleoenvironmental, isotope, and zooarchaeological analyses, and the creation of a firm chronological framework. We summarize these results and advances below, which changed the traditional prehistoric view of the guanaco hunter-gatherer in continental Patagonia, providing sufficient evidence to support the presence of land-shellfisher-gatherer groups in this coastal sector at least during the end of the middle Holocene.

Present-Day Archaeological Research in the San Matías Gulf

The first stage of this new research sought to characterize the coastal space in the region, thereby creating a hierarchy of littoral habitats. This study revealed that there were geo-

logical and structural differences between the northern and western coasts of the SMG. These differences conditioned resource distribution and the regional structure of the archaeological record (Favier and Borella 2011). The use of a distributional method made possible a first regional-scale approximation of the archaeological database. This permitted us to evaluate the density and distribution of archaeological material. On this basis, we selected sites for excavations, thereby obtaining cultural information and datable material.

These distributional models demonstrated that the archaeological signal was unequal across the length of the littoral, with the northern coast being archaeologically denser than the western one. We believe that this varied archaeological signal is related to the presence and accessibility of exploitable resources in the past, a presence and accessibility underscored by the topographical and geological differences between these coasts. Additionally, isotope analysis on human remains detected changes in paleodiets through time. These paleodiets served to indicate the different forms of consumption of available resources. For instance, an initial temporal block (Middle to early Late Holocene; 4800–2200 years B.P.) of intensive marine resource use could be detected in the archaeofaunal (primarily fish, otariid, mollusk, and marine bird remains) and isotopic (predominantly marine diets) databases (Borella and Cruz 2012; Favier et al. 2009; Favier and Scartascini 2012). Additional evidence suggests fishing activities on the basis of the association between otoliths and lithic weights found on ancient marine terraces dating from 6000 B.P. (Favier and Scartascini 2012). In regard to the Late Holocene, the second temporal block, analysis of faunal remains recovered from shell middens points to the joint exploitation of marine vertebrates such as fish, otariids (*Arctocephalus australis* and *Otaria flavescens*),



Figure 1. Study area.

and marine birds, also including the exploitation of small terrestrial vertebrates (tinamids, rodents, and dasypodidae), guanaco (*Lama guanicoe*), and ñandú (*Pterocnemia pennata*) remains (Borella et al. 2011). These data posit a process of diversification in the exploited fauna that is also reflected in the human paleodiets, seen in the emergence of mixed or continental diets during the Late Holocene up to 400 B.P. (Favier et al. 2009).

Regional lithic technology on both coasts is dominated by a low-energy investment in the manufacture of artifacts. During the early period there is a preponderance of fishing technologies (fishing lines and net weights), as well as other more generalized or poorly specialized tools. An analysis of the lithic assemblages suggests that there are temporal differences in the make-up of toolkits linked to changes in the use of space, mobility, and diet (Figure 2). There is a predominant use of local raw material (fine-grained silica and volcanic rock) (Cardillo and Scartascini 2011). Along the western coast, obsidian was also frequently present from sources up to 500 km inland. The presence of obsidian was perhaps related to patterns of mobility or strategies of indirect sourcing. In relation to this, it is interesting to note that previous studies did not detect economic strategies in the use of local-

ly abundant raw material (Cardillo and Scartascini 2011; Favier et al. 2009).

Currently our research centers on three archaeological areas along the western coast of the SMG (Figure 3), including a site with the only rock art (petroglyphs) recorded to date from the Patagonian coastal area (Figure 4). These petroglyphs are in close association with shell middens dated to ca. 3000 B.P.

The Archaeology of North Patagonia from a Regional Perspective

In Chubut, the region immediately to the south of North Patagonia, there are data on the use of marine resources from the Middle Holocene onward at different coastal sites. These sites showed evidence of mollusks, sea-lions, and marine birds, with little to no remains of fish. Meanwhile, the isotope evidence points to the predominance of a mixed diet (Gómez 2007). This consumption of high-trophic-level marine resources links well with archaeofaunal data showing a higher intensity consumption of pinnipeds during the last phase of the Late Holocene (1000 to 400 B.P.) (Gómez 2007:158).



Figure 2. Shell tool (above) and projectile points (below).

The differences with the North Patagonian coast (SMG, Río Negro) gravitate around two topics, the first of which is the existence of temporal tendencies in this area. This includes, based on isotope and archaeofaunal evidence, an early period of intensive use (Favier et al. 2009). Secondly, fishing appears to have been very important along the North Patagonian coast. The evidence for this lies in the copious presence of fish remains in the shell middens sampled and the discovery of hundreds of otoliths on the surface of certain areas from 6000 B.P. onward (Favier and Scartascini 2012). This situation is very different from that of the rest of the Atlantic coast of continental Patagonia.

In this sense, our research will not only supply data on the number of exploited species and their means of capture in an area for which little information exists, but will also provide valuable insights into the early peopling of the Patagonian littoral and coastal adaptations. The 7400 B.P. date from

Arroyo Verde Site 1 (studied by Gómez)—where there is evidence for marine resource use in this early site of the Middle Holocene—invites us to explore the potential for an early human occupation of this portion of the Patagonian coast. Similarly, the results from our current research will permit us to discuss whether this early presence of the exploitation of marine resources in this sector can be considered as having emerged prior to the development of early fishing technologies and the intensive use of marine resources along the northern coast of the SMG.

Our research into the SMG coast constitutes a unique case regarding the intensive use of marine resources along the Atlantic coast of continental Patagonia, a conclusion that is supported by isotope, artifact, and archaeofaunal evidence. The importance of our studies lies in the contribution it makes toward understanding the early human occupation of an understudied coastal sector and the role that marine



Figure 3. Western coast sites of SMG.

resources played from the Middle Holocene onward, allowing us to discuss in greater detail the changes in littoral adaptations and the exploitation of marine resources in North Patagonia through time.

Acknowledgments. We are grateful to Drs. Luis A. Borrero and Nora Franco for inviting us to contribute to this volume, to CONICET and Agencia FONCYT for financing our archaeological research, to the Agency Río Negro Culture for giving us permission to work in the area, and to the owners of the fields in San Matías Gulf (Pcia Río Negro) for their assistance in logistics during fieldwork.

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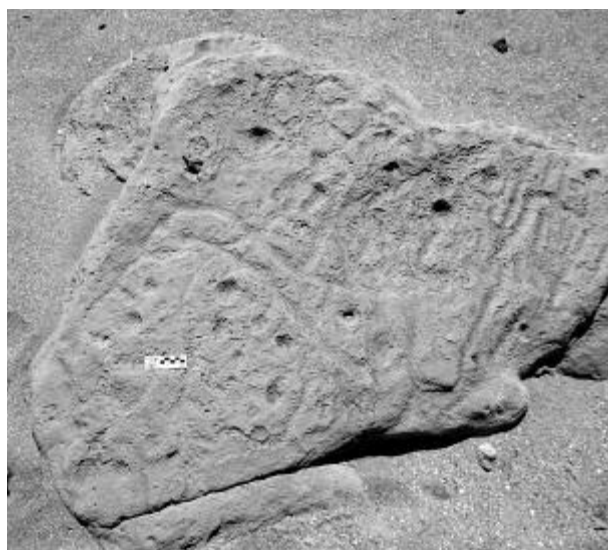


Figure 4. Petroglyphs, west coast of SMG (Punta Odriozola).

ARCHAEOLOGICAL EVIDENCE FOR HUNTER-GATHERER MOBILITY AND DIET CHANGES DURING THE EIGHTEENTH AND NINETEENTH CENTURIES IN THE CENTRAL PATAGONIAN ATLANTIC COAST

Julieta Gómez Otero and J. Eduardo Moreno

Julieta Gómez Otero (julietagomezotero@yahoo.com.ar) is a Ph.D. researcher at the Centro Nacional Patagónico-CONICET, Puerto Madryn, Argentina, and Professor at the Universidad Nacional de la Patagonia "San Juan Bosco," Argentina. J. Eduardo Moreno (moreno@cenpat.edu.ar) is a Ph.D. researcher at the Centro Nacional Patagónico-CONICET and Professor at the Universidad Nacional de la Patagonia.

Studies of horse adoption and its cultural impact among native societies of Pampa and Patagonia are mainly based on ethnohistorical sources. Authors who have addressed the issue include Maria Teresa Boschín, Rodolfo Casamiquela, John Cooper, Raul Mandrini, Mateo Martinic, Lidia Nacuzzi, and Miguel Ángel Palermo. Palermo (1986) offered the more thorough treatment and argued against the uncritical application of the "horse complex" concept to the post-contact period in Argentina. In this work, we will discuss the changes that occurred in the diet of the hunter-gatherers who inhabited the Atlantic coast of central Patagonia. We will use different lines of archaeological evidence and draw comparisons with the ethnohistorical record.

The Problem

Research on the period of European contact in Argentine Patagonia is mainly based on ethnohistorical reports. According to these sources, the economy of the Patagonian hunter-gatherers, known as "Patagones" or "Tehuelches," was based on the exploitation of terrestrial resources, particularly the guanaco (*Lama guanicoe*) and the choique (*Pterocnemia pennata*). It is also mentioned that between the seventeenth and eighteenth centuries, the European horse was adopted as a means for transporting, carrying, and hunting.

In the case of the study area, which comprises the arid coast from Península Valdés (42° S) to Bahía Laura (48°30 S) (Figure 1), the ethnohistorical chronicles show similar trends. According to the length of stay, seasonality, and the amount of information, these reports can be separated into two tem-

poral blocks: sixteenth-seventeenth centuries, and eighteenth-nineteenth centuries. The first block comprises the accounts of three short expeditions (Hernando de Magallanes, William Drake, and John Narborough), carried out between fall and winter (Moreno and Videla 2008). The second block includes numerous long-stay trips during all seasons and better descriptions of the aboriginal way of life. However, in both blocks, the references to the use of marine resources are few and isolated. This information contrasts with the pre-European contact archaeological record, since it indicates intensive utilization of the coastal area and variable exploitation of marine foods.

In the northern portion of the area (Figure 1), the dominant remains correspond to guanaco, followed by mollusks and pinnipeds, while other resources (small mammals, fish, and birds) are less well represented (Gómez 2006). In contrast, in the southern sectors (Figure 1), shellfish, pinnipeds, and bird bones prevail, while terrestrial remains (guanaco, ostrich, or *rhea*, small mammals, and birds) hardly reach 4 percent of the evidence (Arrigoni et al. 2008; Castro et al. 2008). Abundant artifacts, including lithic weights, *rompecráneos*, a dozen harpoons, and a wooden hook probably used to obtain littoral resources, were also recorded.

To explain this contradiction between the written historical sources and the archaeological record, two hypotheses were proposed: the abandonment of marine food consumption (Moreno and Videla 2008) and the less intensive use of the coastal space (Gómez 2006) during equestrian times. In this paper, we contrast and discuss these and other hypotheses

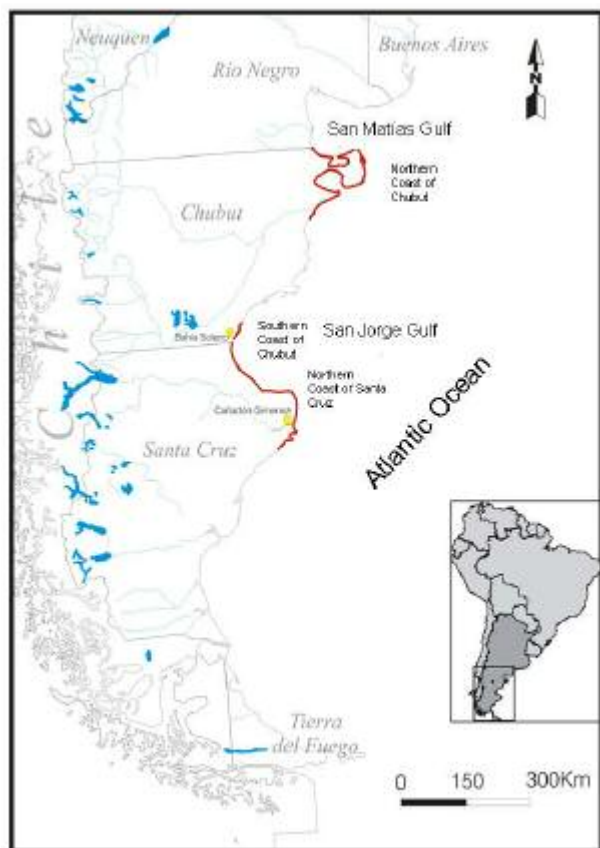


Figure 1. Map of the Atlantic Patagonian central coast, with two cited equestrian sites.

that draw upon a wide range of information: ^{14}C data, archaeofaunal studies, and isotopic analyses (^{13}C and ^{15}N) of human skeletal samples from pre- and post-equestrian assemblages. We fix the chronological limits at 500 B.P. for European contact and 250 B.P. for the introduction of horses. The archaeological evidence comes from the northern coast of Chubut (Gómez 2006), the southern coast of Chubut (Arrigoni et al. 2008), and the northern coast of Santa Cruz province (Castro et al. 2008) (Figure 1).

The Archaeological Data

These coastal areas were occupied since 7,400–6,000 years B.P. (Cruz and Caracotche 2008; Gómez 2006). The most abundant sites are superficial and show clear evidences of intense aeolian and hydrologic erosion, as well as other post-depositional processes. In these sites, shell remains are widespread and mingled with bones and lithic materials,

forming real palimpsests. The presence of isolated shellfish in stratified layers in dunes and alluvial silts was also established, but no shell mound has been found yet.

Eighty-eight sites (including *concheros*, hearth remnants, and burials) were dated (Cruz and Caracotche 2008; Gómez 2006, Gómez et al. 2009; Zangrando et al. 2013). Available chronological data (Figure 2) show a scarcity of sites between 7,400 and 4,300 BP ($n = 8$), a relative abundance of sites from 3,600 B.P. to 400 B.P. ($n = 59$), becoming less frequent during the period of European contact. There are 11 pre-equestrian sites and five equestrian sites. It is interesting to note that equestrian sites represent one-third of all European contact sites, which seems to be a significant difference.

As was mentioned above, archaeofaunal studies in central Patagonia indicate that hunter-gatherer diets included a diversity of terrestrial and marine resources. This was recorded in the middle Holocene period to as far as the pre-equestrian times (Cruz and Caracotche 2008; Gómez 2006, Gómez et al. 2009; Zangrando et al. 2013). In contrast, the only two equestrian archaeofaunal assemblages found (Bahía Solano 13 and Cañadón Giménez First Component) contained isolated shell remains, and in Cañadón Giménez, guanaco and European cattle bones were also found. On a local scale, this contrasts with late Holocene assemblages from the vicinity of Bahía Solano 16 and Cañadón Giménez Second Component, which show high frequencies of shellfish and marine mammal bones (Moreno and Videla 2008).

Finally, isotopic analyses (^{13}C and ^{15}N) on 23 individuals of the northern sector dated at 2,600 B.P. to 200 B.P. indicate spatial and temporal variability in the proportion of marine-origin foods in the diet (Gómez 2006). Concerning temporal variability (Figure 3), there were observed changes through time: (a) 2,600 B.P. to 1,000 B.P. ($n = 8$), intrasite variability in the terrestrial-marine resource ratio; (b) 1,000 B.P. to 250 B.P. ($n = 11$), increments in the consumption of high-trophic-level marine fauna and C_4 or CAM plants; (c) after 250 B.P. or the equestrian period ($n = 3$), increasing intake of terrestrial C^3 proteins and carbohydrates.

Discussion and Conclusions

The evidence presented above shares a similar trend: that of a reduced exploitation of littoral resources (including lower time allocations in coastal space) during equestrian times. One explanation may be that the aboriginal groups left the coastal area due to the potential risks caused by direct encounters with European explorers: violence, conflicts, and epidemics. However, many ethnohistorical reports show that

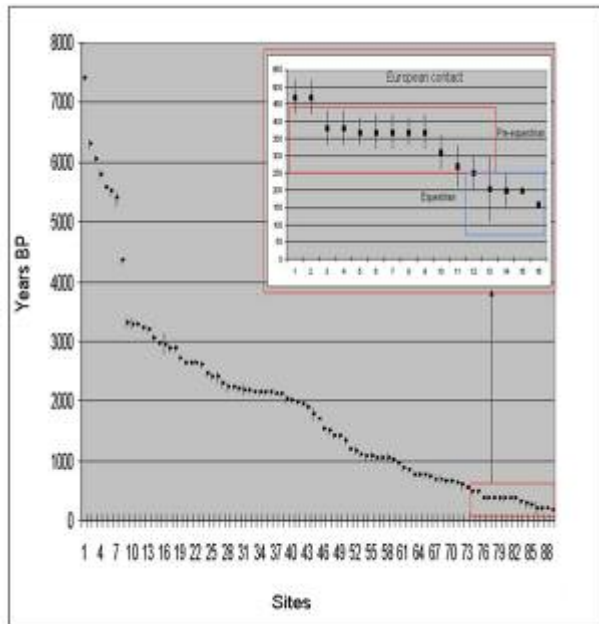


Figure 2. Chronological data of Atlantic Patagonian central coast.

these groups did not avoid contact with Europeans. It is also possible that the abandonment of pinniped consumption was caused by the drastic depletion of sea-lion populations due to their overexploitation by European and North American hunters beginning in the late eighteenth century. But this happened several decades after the adoption of the horse

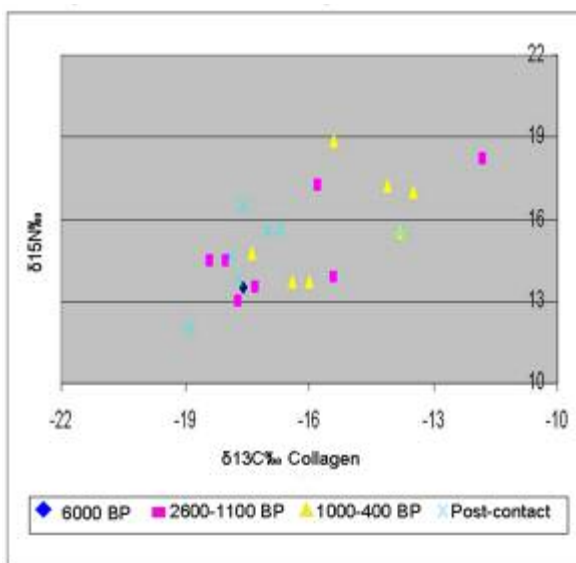


Figure 3. ^{13}C and ^{15}N correlation over time (based on Gómez 2006:Figure 6.5).

(Moreno and Videla 2008). Moreover, pinnipeds were not the only littoral resource exploited by natives.

The third explanation would be the reduction of search and handling costs in resource acquisition that resulted from the use of the horse, which made it easier to catch larger terrestrial prey, such as guanacos and *rheas*, and allowed long commercial trips. The horse was also consumed. Ostrich, or *rhea*, feathers and guanaco skin cloaks, or *quillangos*, were the main products used by the Patagonian natives to trade with other ethnic groups, Europeans, and *criollos*. Among other products, the aboriginals obtained *yerba mate*, wheat flour, sugar, biscuits, and alcoholic drinks. This would explain the results of isotopic analyses that indicate a higher presence of carbohydrates in the average diet during the time of European contact (Figure 3).

Finally, a fourth explanation is related to mobility. Taking into account that horses prefer wet grasses and drink more fresh water than the wild terrestrial Patagonian vertebrates, the arid littoral environment would not be propitious at all. Therefore, the optimal strategy would have been to leave the coastal area and to set up residential camps close to the rivers, streams, or springs in the inland *mesetas*. In fact, many ethnohistorical reports from the eighteenth and nineteenth centuries mention that natives preferred the inland routes because of the scarcity of fresh water sources in the coast (Boschin and Nacuzzi 1979:16).

In conclusion, the information discussed above supports the less intensive use of these littoral sectors and their resources during equestrian times. The more probable explanations would be the mobility changes derived from horse ecology and requirements (especially water) and the reduction in the acquisition costs of their prey. In the future, we expect to explore these hypotheses through more and better archaeological evidence.

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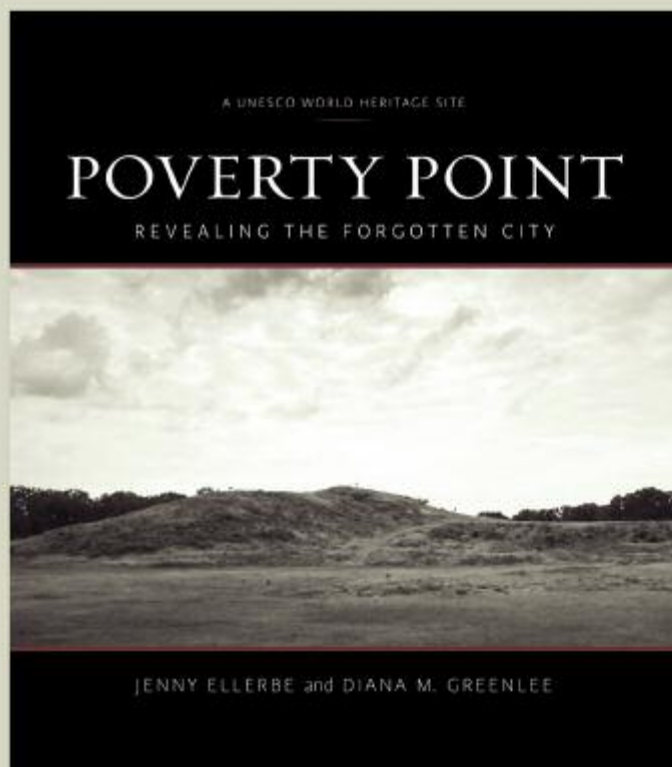
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NEW APPROACHES TO THE STUDY OF HUNTER-GATHERERS OF THE NORTH COAST OF SANTA CRUZ (ARGENTINA)

THE USE OF ROCKSHELTERS

Pablo Ambrústolo and Miguel Ángel Zubimendi

Pablo Ambrústolo (pambrustolo@hotmail.com) and Miguel Ángel Zubimendi (mikelzubimendi@gmail.com) are researchers at the CONICET & Departamento Científico de Arqueología, Museo de La Plata, UNLP.

The Patagonian region is the southernmost continental portion of the world and was colonized by modern humans approximately 12,000–13,000 years ago, only a few thousands of years after the initial peopling of North America (Borrero 2001). The first evidence of human presence in Patagonia was registered during Final Pleistocene to Early Holocene times on the river valleys crossing the Santa Cruz plateau and in the central Deseado Massif. In the Early Holocene, there is direct evidence of human presence on the sea coast by hunter-gatherer groups that exploited marine resources like mollusks and pinnipeds. In the Late Holocene, there was significant population growth in Patagonia, with the development of widespread exchange networks and a diversification in the tool kits of these populations. Examples include the introduction of pottery and specialized technologies for specific resources, including harpoon heads and grinding tools (Borrero 2001).

Throughout the millennia, Patagonian hunter-gatherers sought guanaco (*Lama guanicoe*), and supplemented their diet with other animal species (including mollusks) and vegetables. These human groups had a varied lithic technology, making use of high-quality raw materials available in the territory. This occupation process ended in the late nineteenth century with an abrupt population decline of the native Patagonian inhabitants (Borrero 2001).

The north coast of Santa Cruz (NCSC, Figure 1a) comprises the territory adjacent to the Atlantic coast of Argentinean Patagonia, located between the border of the provinces of Chubut and Santa Cruz to Laura Bay. To the west, it encompasses the intermediate zone between the coastline and the central Deseado Massif (Figure 1b). The archaeological

record is presented mostly on the surface as isolated finds or as large concentrations of lithic artifacts. In the coastal zone, the most common site type is shell middens, which are located on coastal dunes (upper Figure 2); these sites have stratified deposits that include materials such as bones and malacological remains. They also include lithic artifacts of local raw material such as red chert and non-local black obsidian (Ambrústolo 2011). Studies of the distribution of these sites suggest a use of space associated with the high availability of shellfish beds in certain sectors (Castro et al. 2003; Zubimendi 2010). The shell middens reflect an intensive use of marine resources on coastal sites, also indicating high rates of reoccupation from the Middle Holocene and mainly during the Late Holocene (Ambrústolo 2011; Castro et al. 2011; Zubimendi 2012; Zubimendi et al. 2005). Also, different types of human burials are recorded with radiocarbon dates between ca. 3000 and ca. 300 B.P.

The zone of territory characterized as intermediate (Figure 1b) shows a low archaeological density. These are mostly lithic surface concentrations of varying extent and density, recorded mainly in canyons and lagoons, which are interpreted as the product of short occupations (Castro et al. 2003; Zubimendi 2010).

In recent years, we have focused our research on this intermediate zone with the aim of evaluating whether the rocky outcrops were used as shelters or habitation sites in the past. We explore whether they have been part of the home ranges of the coastal hunter-gatherer populations of NCSC, and how they were used. The intermediate zone was likely used to obtain resources that are not available on the coast, such as very good quality lithic raw material.

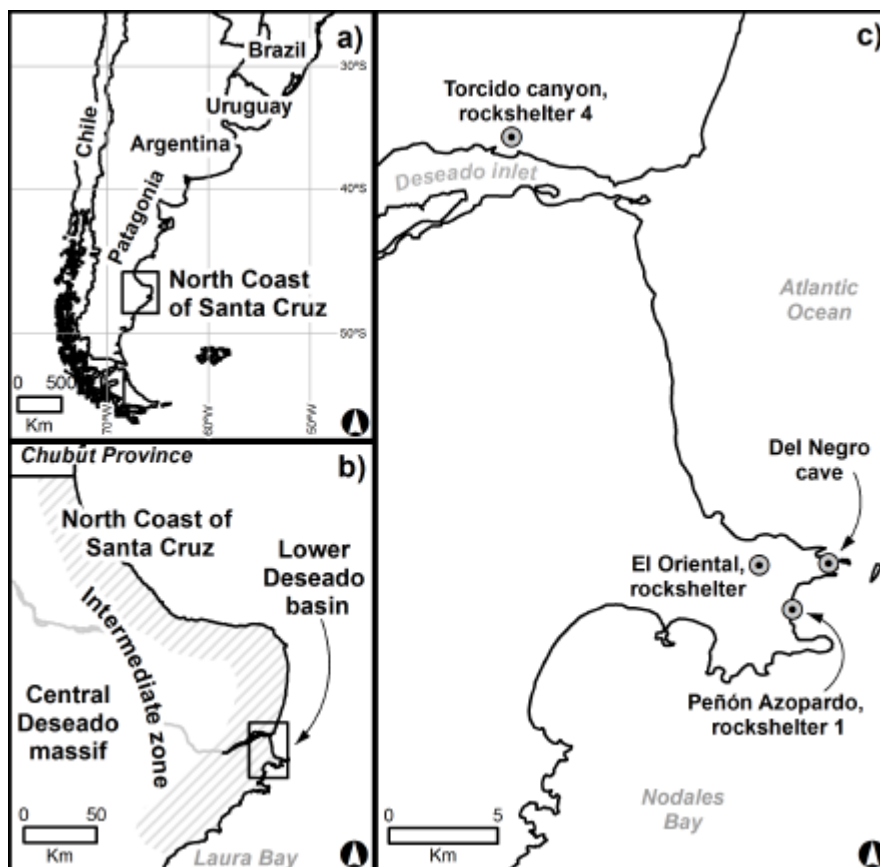


Figure 1. (a) Location of the north coast of the Santa Cruz archaeological area; (b) different zones mentioned in the text; (c) location of archaeological sites mentioned in the text.

We believe that studying the use of the coast and the intermediate zone could advance our knowledge of how hunter-gatherer populations exploited resources heterogeneously distributed in space. At this point in our research we begin with a simple model, but we believe that it is analytically useful for other regions in the world, where we can see clear differences in the distribution of resources. In this sense, it should be mentioned that the shellfish and pinnipeds are only found on the coast, while in the intermediate zone it is possible to find raw materials of very good quality for knapping and higher densities of guanaco. Undoubtedly, the hunter-gatherer populations employed strategies that implied different home ranges to procure resources either through direct procurement or through exchange networks. In this way, we believe that the study of the archaeological record of the rockshelters located in the intermediate zone (where the existence of other stratigraphic archaeological

sites is virtually null; see Zubimendi 2010) is a valid pathway of analysis to assess the extent of the home ranges of these and other coastal groups.

The Study of Rockshelters in the NCSC

We have identified several rockshelters in the lower Deseado basin and its surroundings (Figure 1c) that have provided evidence of human settlements in the past (Ambrústolo 2011; Ambrústolo et al. 2011). We began systematic studies to evaluate the role of rockshelters within the settlement and subsistence system of the human groups that occupied the NCSC during the Holocene. We believe that these studies will complement the information generated so far in the excavation of stratified shell middens on the coast and the distribution of lithic artifacts in the intermediate zone. Also, this information will allow us to deepen discussions related



Table 1. Location and Radiocarbon Dates from Rockshelters of the NCSC.

Location	Site	Chronology, b.P. (Lab Code)	References
Coast	Cueva del Negro	1170 ± 110 (LP-2290)	Zubimendi et al. 2011
		1220 ± 80 (LP-2047)	
		1290 ± 50 (LP-2279)	
		1340 ± 60 (LP-2065)	
		1390 ± 70 (LP-2320)	
		1730 ± 80 (LP-2071)	
	Peñón Azopardo, rockshelter 1	1690 ± 60 (LP-2560)	Ambrústolo 2011
Intermediate zone	Alero El Oriental	1530 ± 60 (LP-2267)	Ambrústolo et al. 2011
		5150 ± 80 (LP-2311)	
		5810 ± 110 (LP-2218)	
		5860 ± 90 (LP-2310)	
		6930 ± 100 (LP-2318)	
	Torcido canyon, rockshelter 4	1690 ± 90 (LP-2908)	This paper
		2760 ± 70 (LP-2762)	

to the mobility ranges of these hunter-gatherer populations in the context of effective use of space, considering the coastal and the intermediate zone. Both on the coast and in the intermediate zone, we found rockshelters with evidence of human occupation and radiocarbon dates from the Middle and Late Holocene (Table 1).

Studies of the stratigraphic sequences of rockshelters from this area revealed the earliest evidence of occupation of the NCSC (Table 1). These were found at the site Alero El Oriental, an overhang located in a small canyon (called *cañadones* in Patagonia) 1.5 km off the coast (Figures 1c and lower 2). At this site, there is also evidence of the use of marine resources since ca. 7000 B.P., mainly some bones with cut-marks and thermal alterations of Otariidae (*Arctophoca australis* and *Otaria flavescens*), several species of sea birds, and several malacological remains with thermal alterations, these last directly associated with hearths (Ambrústolo et al. 2011). Non-local obsidian flakes have been found in these early occupations, which would have come from Pampa del Asador (near the Andean cordillera), at least ca. 380 km to the west (Ambrústolo et al. 2012). This suggests the existence of some kind of relationship, probably via exchange networks, since at least ca. 7000 B.P.

In general, the archaeological record in rockshelters can be characterized by the succession of several small and discrete

hearths with low frequencies of bone and malacological remains and also medium frequencies of lithic artifacts. These characteristics suggest that the occupational events might have been of relative low intensity, and in most cases the faunal record shows that the terrestrial resources have been used with higher intensity than marine ones. However, it should be mentioned that in most rockshelters marine resources are recorded in lower densities, during both the Middle and the Late Holocene. Evidence suggests that the rockshelters were used as refuges of medium or short duration and were part of the home ranges for hunter-gatherer groups who occupied the coast for longer periods of time. It is likely that the location of rockshelters, usually within small rocky canyons, favored a greater variability in resource exploitation, given that in their vicinity there is usually a higher availability of lithic raw materials of good quality. The small canyons also provide an advantage for hunting by interception of guanacos (*Lama guanicoe*) (Ambrústolo 2011; Ambrústolo et al. 2011). The rockshelters near the coast also have access to marine fauna, especially mollusks, which may be transported several kilometers inland. The Cueva del Negro site should also be mentioned. The occupations in this cave located in the coast itself are dated between ca. 1600 and 1200 B.P. and correspond to a dense shell midden that occupies almost the entire volume of the cave. Like the shell middens on coastal dunes, it has a very dense archaeological record with evidence of intensive exploitation of marine resources, primarily mollusks and otariidae, and a high density of lithic artifacts and other types of instruments, like lithic knives, bone harpoon heads, and spear-thrower hooks (Zubimendi et al. 2011).

Figure 2 (opposite). (upper) A shell midden in the coastal zone and (lower) Alero El Oriental rockshelter.

Final Considerations

Previous studies in NCSC have been focused almost exclusively on coastal shell middens, which reflect an intensive exploitation of marine resources, especially during the Late Holocene (Ambrústolo 2011; Castro et al. 2011; Zubimendi 2012; Zubimendi et al. 2005, 2010).

New preliminary studies currently concentrated on rockshelters suggest that, by the Middle and Late Holocene, the coastal hunter gatherers who occupied the lower Deseado basin used different habitation contexts (sand dunes and rockshelters) in a complementary manner. These variations were likely related to the distance of the resources (lithic raw material and food, like mollusks and pinnipeds), their predictability, their availability, and the scope of the home ranges of human groups. We believe that the choice of settlement sites in the NCSC was mainly related to the availability and accessibility of various marine resources. The evidence registered in these new studies of rockshelters suggests, as has been said previously (Castro et al. 2003; Zubimendi 2010), that the intermediate zone would have been used with less intensity.

The contexts of occupations recorded in shell middens would be related to residential use. The evidence identified in the rockshelters suggests a more general use, linked with activities undertaken in relatively short periods, perhaps related, for example, to the supply of siliceous raw materials suitable in size, which are not common on the coast. By the same token, these contexts may have been used for the exploitation of food resources not available on the coast, mainly guanacos.

Advances in the analysis of rockshelters and the territory near the coast will let us expand our understanding of the dynamics of the use of the coast, the intermediate zone, and also the Patagonian interior. Existing data for the NCSC can be complemented and integrated with information from rockshelters, allowing discussions on a more regional and temporal-spatial scale. Also, these studies will allow us to further evaluate the relationship between mobility and strategies of use of space carried on by human populations that inhabited the coast and the interior of Patagonia in the past.

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ARCHAEOLOGY NEAR THE SOUTHERN ICE-END

CURRENT ADVANCES IN HUMAN INTERDISCIPLINARY RESEARCH IN CENTRAL WESTERN PATAGONIA

César Méndez and Omar Reyes

César Méndez is Professor of Archaeology at Universidad de Chile and Principal Investigator of FONDECYT 1130128 project. Omar Reyes is associated researcher at Centro de Estudios del Hombre Austral, Universidad de Magallanes and Principal Investigator of FONDECYT 1130151 project.

There is a popular belief that the region of Aisén in Chilean Patagonia received its name from Captain FitzRoy's observations of glaciers and snowdrifts as the *HMS Beagle* cruised the coast near the Southern Hemisphere's ice-fields. Although this belief—mostly held by tourists—is seriously challenged (it probably originated from a transformation of a word of native origin), it reflects the fact that this remote region remains marginal. In fact, our image of hunter-gatherers inhabiting this area is based on the details displayed in chronicles and documents from further south, near the Strait of Magellan, and not extending further than the last 500 years. Thus, this region provides a unique opportunity for assessing cultural trends through the archaeological record, since archaeology is the primary source for anthropological knowledge. Past human evidence is traceable to the Pleistocene/Holocene transition, and given the fact that this region poses critical environmental challenges, the nature of human–ecosystem interactions is among the foremost topics of interdisciplinary research.

Central-western Patagonia or Aisén is a region of notable contrasts because the Westerlies discharge water over the Andes, which generates two major bioclimatic parallel bands: a humid oceanic climate with dense evergreen forests to the west and a semi-arid biome with open grasslands in the eastern steppes (Figure 1). Such an environmental contrast undoubtedly influenced human occupation of the region. Thus, it is crucial for interpreting the archaeological record. Over the last 10 years we have assembled an interdisciplinary team with the mission of studying the human–climate interactions in north-central Aisén. This team initially focused on the steppe east of the Andes, but has currently expanded into the Pacific archipelagos. This expansion of the study area has involved new challenges related to the comparability of archaeological records, variability in formational processes, and the interpretation of cultural trends.

In order to obtain comparative data in western and eastern Aisén, we have designed a methodological approach that aims to understand archaeological site distribution and patterns. We use ^{14}C dates in order to measure human signals in time, applying geochemical analyses on obsidian artifacts to ascertain mobility at large scales and stable isotopes to establish dietary choices and preferential selection of environments.

Comparing the archaeological records of western and eastern Aisén represents a major challenge. Visibility is high in open steppe settings, and recording surface concentrations, such as lithic scatters, is relatively straightforward (Figure 2). Closed forests are more challenging (Méndez and Reyes 2008). Within this biome, surveys have been limited to the main water courses such as the Cisnes basin, because the abrupt mountainous topography produces an additional restriction (Reyes et al. 2009). Visibility is at its lowest at coastal settings, where, besides the occurrence of the highest precipitation, mountains descend directly into the sea, limiting pedestrian displacement. All archaeological undertakings, therefore, include navigation (Figure 3). These marked contrasts generate extensive open inland surveyed areas and limited linear zones along the coast.

Archaeological sites in the steppe are most frequent and even recurrent, to a certain point. They have been observed in areas such as Cisnes, Ñirehuao, and other river basins further south in the region (Ibáñez, Jeinemeni, and Chacabuco; Mena and Lucero 2004). However, it is remarkable that an area such as the steppe of Simpson basin, although equivalently sampled following identical protocols, has a significantly low occurrence of archaeological evidence, to the point of considering it as an “empty” space (Méndez et al. 2013). Therefore, one research question of utmost relevance is to ascertain the variability in frequency of the archaeological

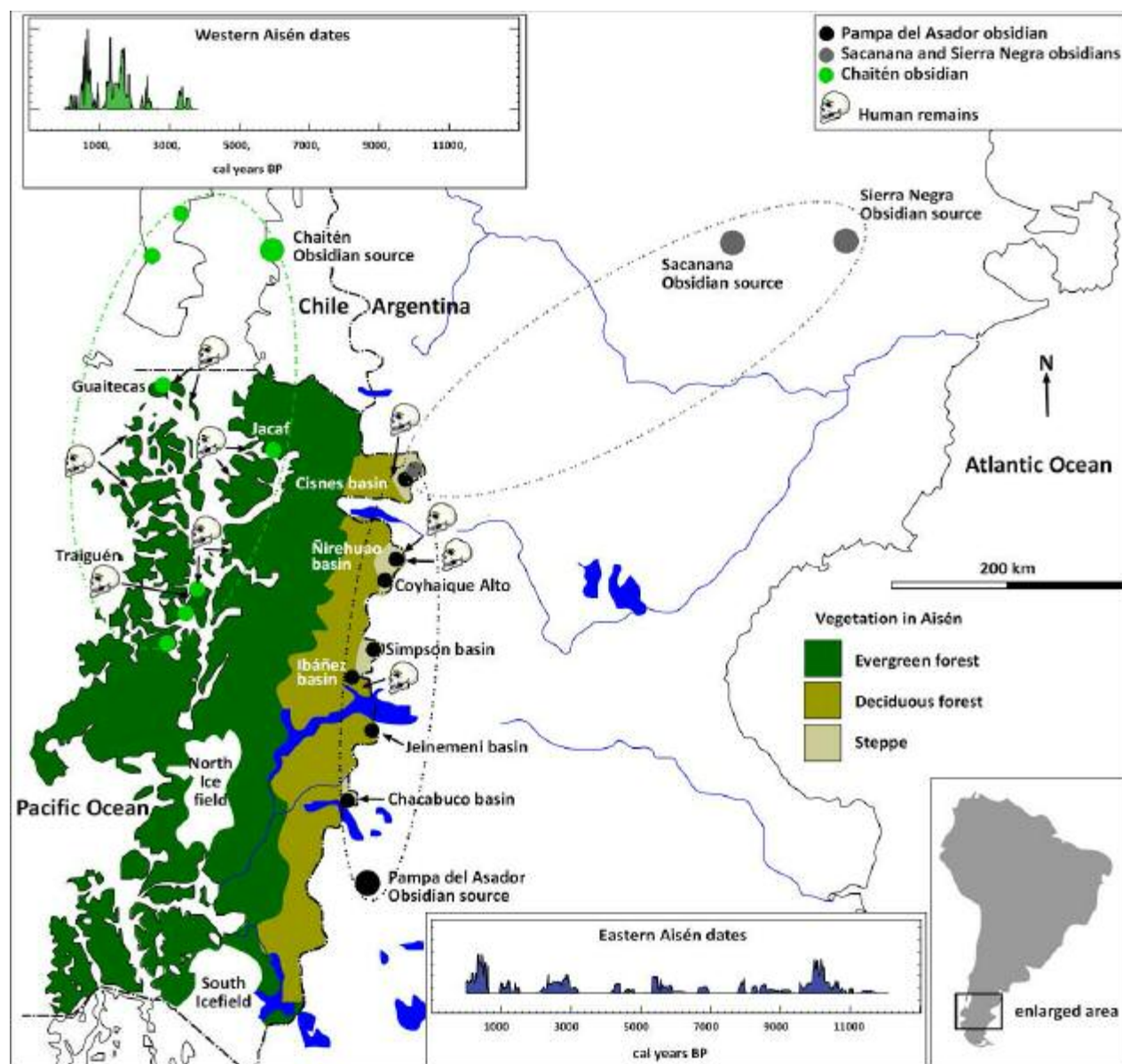


Figure 1. Map of the study area depicting areas sampled, localities with bioarchaeological record, obsidian artifact distribution, and summed probability plots of the radiocarbon records.

record at a regional scale in order to address possible causes for these differences. Sites in this environment include both open-air and rock-sheltered locations (Figure 4). Material assemblages favor lithic evidence because bone survival is restricted almost exclusively to dry caves. Functional variability includes residential sites, logistical camps, resource pro-

curement localities, and human burials. Rock art is unevenly distributed, and only the Ibáñez basin yields an outstanding number of paintings on caves.

Characteristics of the archaeological record at the western channels are less known because surveys have been limited



Figure 2. Surface surveys at high altitude (> 950 m asl) inland seasonal lakes, La Escuadra site, Ñirehuao basin.



Figure 3. Test excavations at a shell midden in Jacaf Channel, showing the intertidal erosion.



Figure 4. Excavations of late Pleistocene/early Holocene levels at Cueva de La Vieja, Ñirehuao basin.

to a 250-km linear cruise in the Chonos Archipelago (Reyes et al. 2013) and occasional informal reports. Sites include open-air, near-shore locations, like fishing pens, shell middens, intertidal lithic scatters, and human burials in caves and within middens (Figure 5). Archaeological assemblages include large bifacial spear points, dominant expedient lithic technology, and a wide variety of evidence for resource consumption, including remains of mollusks, fishes, seabirds, and marine mammals.

Radiocarbon chronology at the eastern steppes spans the last 11,500 calibrated years before present (cal B.P.), while dates on the western coast start at 4,000 cal B.P. (Figure 1). These trends should be regarded as preliminary because sampling is uneven. However, dates in the steppe are generally recorded at rockshelter locations where a series of redundant occupations have been excavated in sites such as El Chueco 1 and Baño Nuevo 1, in the Cisnes and Ñirehuao basins, respectively. These sites show discontinuous human assemblages throughout the Holocene until around 3000 cal B.P., when settlement patterns changed and turned broadly into larger open-air sites with poor chronological resolution. On the

other hand, coastal sites display a human signature clustered during the last 2,000 years, mainly built from dates on bioarchaeological remains (Reyes et al. 2013). Site redundancy in this area is shown at collective burials and through the successive stratified shell midden deposits, as in Posalas Conchillas in Traiguén Island; however, these sites represent short-span occupations.

In sites at both bioclimatic bands, we have been able to record the occurrence of exotic obsidians (Figure 1). Obsidian provenance by means of geochemical analyses (XRF and ICP-MS) has been useful in defining major mobility routes. Comparative data suggest that, since the early Holocene period, inland groups recurrently procured their obsidian from inland sources, such as Pampa del Asador, Sacanana, and Sierra Negra (Méndez et al. 2012). On the other hand, archipelagic peoples acquired their obsidian from the coastal source of Chaitén, thus signaling two separate exotic material procurement patterns. This information has been cross-checked with isotopic analyses ($\delta^{13}\text{C}$ and $\delta^{15}\text{N}$) performed on most of the available human remains from the region. These results, in light of regional foodwebs, show two different

dietary patterns, thereby corroborating the idea that inland peoples remained inhabiting and consuming resources from the steppe (Méndez et al. 2014), while inhabitants of the Chonos Archipelago had a distinctive diet based on coastal and marine products (Reyes et al. 2013).

To date, archaeological results show two major separate groups populating western and eastern Aisén (Méndez and Reyes 2008). The presence of a biogeographical barrier such as the Andean mountain range, densely covered by forests and ice fields, modeled human distribution differently than other areas in Patagonia, such as at the Atlantic coast or the Strait of Magellan, where contacts between maritime and continental hunter-gatherers were common. The two separate groups populating Aisén show distinctive archaeological records that may be partly explained by formational processes and visibility issues. However, these explanations do not fully account for the observed variability. Site characteristics,

chronological patterns, obsidian occurrences, and stable isotopes, to this date, corroborate two separate bioclimatic bands of distribution. Hunter-gatherer groups located to the west and east of the Andes show no convincing archaeological evidence of cultural interaction. In an earlier paper, we reported an east-west incursion of steppe peoples into the forest around 2,800 cal B.P. (Méndez and Reyes 2008), which was probably triggered by a drying trend in environmental conditions, as suggested by local pollen records (De Porras et al. 2012). This idea is supported by redundant dates signaling brief occupations, which yielded lithic technology whose attributes were those expected for steppe bifacial designs. The reasons why this territorial extension was not prolonged in time and the possible factors that discouraged a more permanent dwelling in the forests remain questions for future study. Possibly, the fact that these two areas were never densely populated, as shown by the low frequency of the archaeological record, accounts for the limited interaction.



Figure 5. Surface collection at the intertidal lithic scatter of Seno Gala 1.

Contact between eastern and western populations remains one of the chief questions yet to be answered. We cannot rule out any alternative, especially until a more thorough and equivalent survey is achieved at both environmental bands. However, it is noteworthy that most populations nowadays reside along major river courses within the forest, and news of the occurrence of archaeological sites, though not infrequent, is not as common as in the steppe or on the coast.

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MOBILITY AND HUMAN INTERACTION IN SOUTHERN PATAGONIA

Nora Viviana Franco and Luis Alberto Borrero

Nora Viviana Franco (nvfranco2008@gmail.com) and Luis Alberto Borrero (laborrero2003@yahoo.com) are Ph.D. researchers at the Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET, IMHICIHU) and professors at the Universidad de Buenos Aires, Argentina.

The study of hunter-gatherer mobility lies behind many archaeological projects operating in central-southern Patagonia. Most of these projects share a methodological interest in raw material provenience, the distribution of artifacts made on rocks with a known source, and stable isotope data on human bones. Among other raw materials, it is the distribution of obsidians with highly localized provenance that constitutes one of the most important sources of information. Artifacts made from black obsidian from Pampa del Asador present a relatively wide distribution on the steppes, reaching places located more than 500 km from the source. Green obsidian from the region of the Otway Sea in southwest Chile has a more restricted distribution, but one that basically affects the maritime world, with only limited outliers in the hinterland. Gray banded obsidian from the Baguales region, south of Lake Argentino, is predominantly distributed on the southern portion of Patagonia (Stern 2000) (Figure 1).

Our synthesis will focus here on two areas: the first is the area between the Chico and Santa Cruz river basins and the second includes Última Esperanza, near the Pacific Ocean and the Pali Aike volcanic field in the east (Figure 1).

The Chico and Santa Cruz River Basins

This area comprises two different environments: the Southern Deseado Massif, a morpho-structural geological region, and the basaltic plateaus located to the south. As such, there are important variations in the availability of water, rockshelters, and excellent quality rocks, which would have posed different problems for hunter-gatherers. In addition, the Chico River has its origins close to Pampa del Asador, so that it is possible that some nodules of black obsidian were found in this river basin. The existence of arid periods in this area, inferred both from regional information and from local studies by Mancini et al. (2013), seems to have had an influence on the frequency and extent of human occupations.

In this case, logistic occupations corresponding to the Pleistocene-Holocene transition during a wet period were detected in the southern Deseado Massif in the La Gruta area (La Gruta 1; Franco et al. 2010; Figure 2). Probably as part of their personal gear, hunter-gatherers were carrying black obsidian and a translucent chalcedony available around 25 km to the north. Occupations at sites located at distances of around 25 km ca. 8000 years B.P. recorded similarities in raw material and bifacial technology. This and other records suggest that the Southern Deseado Massif was the home of the same cultural group. According to palynological evidence (Mancini et al. 2013), there is a decrease in water availability after that time, during which the first evidence of occupation of the basaltic canyons to the south is found.

Although basaltic canyons near the Santa Cruz River in some cases reach the water table, evidence of their human occupation is highly discontinuous, restricted to stays around ca. 7700 and between ca. 1600 and 1100 years B.P. Black obsidian artifacts have been found in high frequency in this area, suggesting a north-south circulation, which seems to be reinforced on the basis of rock art similarities recorded by other researchers.

To the south of the upper Santa Cruz River basin, black obsidian was also part of the transported gear recovered at the early Holocene deposits of Chorrillo Malo 2 (Figure 3), supporting a general north-south peopling direction. Human occupation in this area begins at ca. 9700 years B.P., during a wet period, but was highly discontinuous until ca. 4300 years B.P. Sometime afterwards, raw material circulation, the similarities in the technology, and the redundant use of places to bury their dead suggest that lowlands and highlands south of this basin were used by the same cultural group. Similarities between these burials and those located near the Magellan Strait suggest the existence of regular contact between these regions ca. 3900–3500 years B.P. (Franco et al. 2011). Presence of green obsidian by this time also sug-



Figure 1. Study area and location of sites mentioned in the text. LG1: La Gruta 1; ChM2: Chorrillo Malo 2; FC: Fell's Cave; LS1: Cueva Lago Sofia 1; CdM: Cueva del Medio; LA: Lake Argentino.

gests the existence of interaction with southwestern regions. In spite of the establishment of contact to the south, the presence of black obsidian coming from the north (Pampa del Asador), probably indirectly acquired, continues until ca. 1100 years B.P. Climatic oscillations between arid and humid periods are present in the upper Santa Cruz during this time, with a longer drier period, ca. 1000 years B.P., during which there is no recorded human presence. There is a subsequent change, with the appearance of a different technology and new ways of burying the dead, which may suggest the presence of different human populations, a hypothesis that remains to be explored.

Última Esperanza and the Pali Aike Volcanic Field

The early human occupations of southern Patagonia are found both in Última Esperanza and in the Pali Aike Vol-

canic Field (Figures 4 and 5) and are dated ca. 11,000 years B.P. The evidence from Última Esperanza was obtained at Cueva del Medio and Cueva Lago Sofia 1 and includes hearths, bone and lithic tools on local rocks, and broken bones of both modern and Pleistocene fauna, primarily horse (*Hippidion saldiasi*) (Martin 2013). The best evidence in Pali Aike was obtained at Fell's Cave, mostly characterized by the use of local rocks and the exploitation of guanaco complemented with extinct fauna, especially horse and ground sloth (*Mylodon*) (Martin and San Román 2010). Increasing population is indicated through time, particularly at Pali Aike. This pattern is expressed in the colonization of most of the available environments. Some raw materials are good markers of changing degrees of interaction. The exotic rocks recorded during the late Holocene are dominated by obsidians, gray banded obsidian from Baguales being the most abundant (Charlin 2009). At the same time, a pattern of mar-



Figure 2. Lagoon adjacent to La Gruta 1 archaeological site.

ginal use of maritime resources becomes evident. Stable isotopes on human bones confirm this pattern by indicating mixed diets. This complementary use of terrestrial and maritime resources appears to increase during the last 1,000 radiocarbon years, a time during which green obsidian from the southwestern channels and limited quantities of mollusks were recorded at sites in the hinterland.

The upper Gallegos River marks a change in the abundance of archaeological remains, with long stretches in which no artifacts were ever found. Recent research near the Baguales range and the Cancha Carrera area indicates the presence of what has been characterized as an independent populational core during the Late Holocene (Charlin and Borrero 2012),

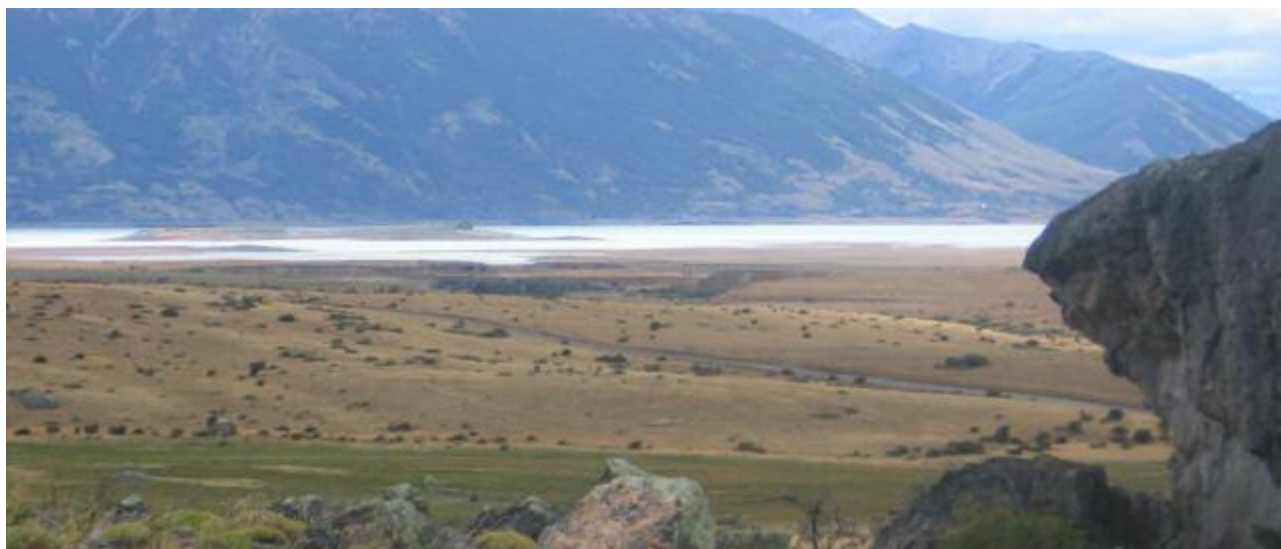


Figure 3. Location of Chorrillo Malo 2 archaeological site.



Figure 4. Panoramic view at Cerro Benitez, Última Esperanza, where the mentioned sites are located.



Figure 5. Pali Aike Lava Field, where Fell's Cave and several other sites are located.

which probably encompasses portions of the Última Esperanza territory in Chile.

Conclusion and Perspectives

Generally speaking, water availability seems to have played an important role in the selection of places for human installation in the arid environments of central-south Patagonia. Populations appear to have been very low, especially during the initial pulses of colonization. In spite of the evidence for increased interaction among populations of southern Patagonia through time, information available nowadays suggests that at least some areas were not continuously occupied (i.e., the southern upper Santa Cruz basin and the basaltic plateaus north of the Santa Cruz River). In some cases, this may perhaps be the result of water deficits, but other cases are more difficult to explain given the current state of our knowledge. This highly diverse and complicated panorama suggests that multidisciplinary projects will be required in order to understand the successive cultural configurations today represented in Patagonia.

Similar adaptations and chronologies are indicated in places like the Southern Deseado Massif, Pali Aike, or Última Esperanza. How much interaction took place between those early occupations remains an open question. However, a general pattern of diversification is indicated, to the point that some of the most classic Patagonian adaptations are related to populations displaying notably different phenotypes.

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PATAGONIAN ARCHIPELAGO AND TIERRA DEL FUEGO ISLANDS

RECENT ARCHAEOLOGY, RESEARCH FOCUS, AND STRATEGIES

Manuel San Román Bontes, Jimena Torres Elgueta, and Flavia Morello Repetto

Manuel San Román Bontes (manuel.sanroman@umag.cl) and Flavia Morello Repetto (flavia.morello@umag.cl) are researchers at the Universidad de Magallanes, Instituto de la Patagonia, Centro de Estudios del Hombre Austral, Punta Arenas, Chile. Jimena Torres Elgueta (jimenatorres77@gmail.com) is a Ph.D. student at the Université Paris 1 Panthéon- Sorbonne, Laboratoire Ethnologie Préhistorique (UMR 7041-CNRS) & Maison de l'Archéologie et de l'Ethnologie.

Two major problems related to the dynamics of peopling have been addressed by the archaeology of the Patagonian Archipelago and the Tierra del Fuego Islands (Figure 1). The first focuses on the main island of Tierra del Fuego, separated from the continent by the opening of the Strait of Magellan during the early Holocene and, at the time of historic contact in the sixteenth century, populated by terrestrial hunter-gatherer groups called Selk'nam. Their origins are still subject to debate. Did they originate from human populations isolated by the opening of the Strait during the early Holocene? Or were they the product of Holocene recolonization by groups from southern Patagonia? The second problem concerns the origins and evolution of the Patagonian and Fuegian archipelago settlement and associated hunting and sea craft navigation technologies, which appear in the coastal and island territories as early as 6500 years B.P. Discussion about origins centers on two hypotheses: (1) the expansion or migration of populations across the Pacific Coast from north to south and (2) local processes of adaptation and innovation from terrestrial hunter groups of Patagonia that ventured into the exploitation of marine resources and developed technologies, including transport facilities and a specialized set for hunting pinipeds (San Román 2014).

Tierra del Fuego Island

Located in southernmost South America, this island was intermittently joined to the continent until ca. 8000 B.P., when the Strait of Magellan opened, defining the main island and the Fuegian archipelago. Early peopling occurred during the Pleistocene-Holocene transition, and culturally distinct terrestrial and maritime hunter-gatherer groups inhabited the area until the twentieth century. An important archaeological gap exists between the earliest evidence, ca. 10,500 B.P., and the Middle Holocene occupations that follow, ca. 5000 B.P. This led to a research program with multiple foci that included:

- (1) The development and testing of successive multiple-stage survey designs emphasizing subsurface techniques such as coring.
- (2) Landscape reconstruction and dating by tephrochronology and paleosoil features, important in the design of subsurface surveys and subsequent discussion.
- (3) The discussion of cultural dynamics and adaptive strategies for groups that inhabited Tierra del Fuego after it became isolated and before the effective occupation of the island, as explained by the peopling model proposed by Borrero (1989–1990), that is, ca. 2000 B.P.

This was achieved by new archaeological results that produced an archaeological record relevant for our research interests, the assessment of previously known archaeological sites, and information on lithic exchange based on obsidian geochemical analysis. Among the known sites, rockshelter Marazzi 1 proved to be of special interest. Modern excavations, re-dating, and geoarchaeological analysis allowed us to rule out the presumed human occupation dated at 9590 B.P. This occupation was questioned on the basis of the identification of a natural buried soil horizon radiocarbon dated to 8840 B.P. and cultural material (bone) from the same stratigraphic unit dated to 4550 B.P. (Morello, Borrero, et al. 2012). Moreover, the record indicates the reoccupation of the site during the Middle Holocene, displaying a general adaptive strategy based on land and marine resources but with no specialized marine acquisition technology or seasonal exploitation. The evidence of interaction provided by obsidian artifacts indicates exchanges between north and south of the Strait of Magellan starting ca. 5000 years B.P.

The discussion of chronology, location, and inventory of the archaeological record in relation to landscape and paleoenvironmental changes during the Holocene was crucial. Also, the survey methodology included an evaluation of formation and natural and cultural post-depositional processes result-

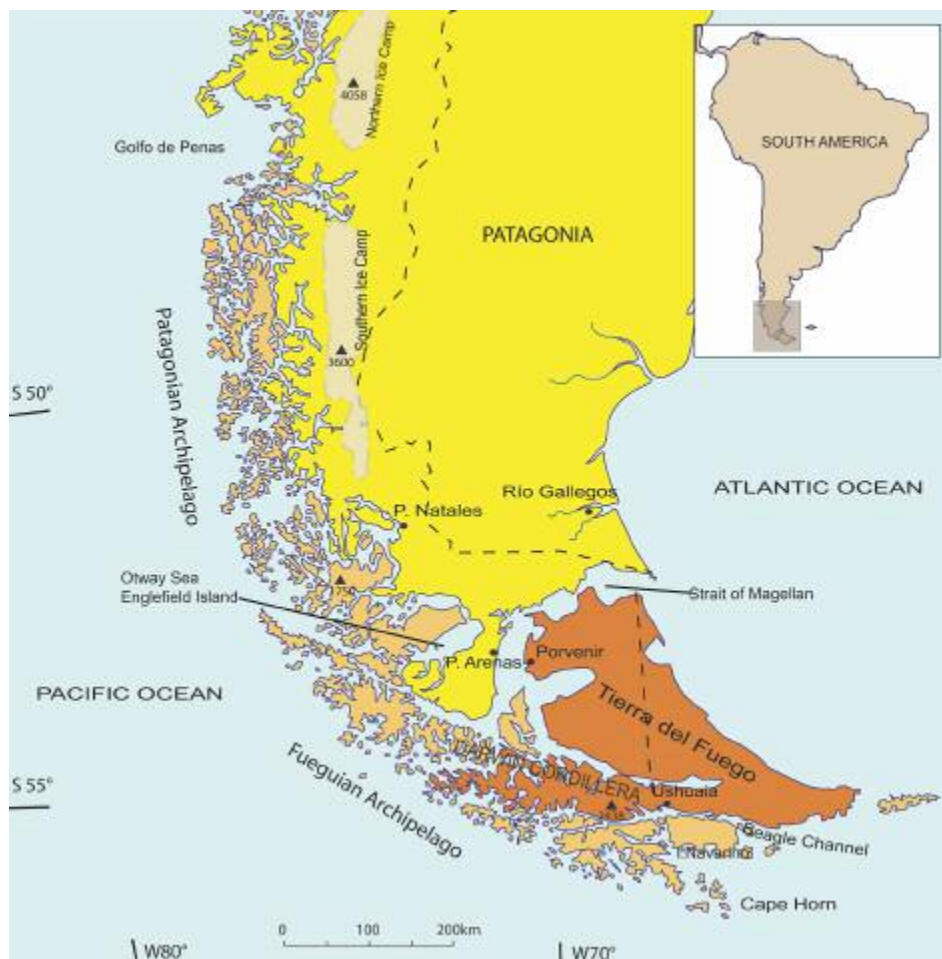


Figure 1. Regions and areas of Patagonian Archipelago and Tierra del Fuego Islands.

ing in an improved understanding of regional taphonomic processes.

Results indicate that harsh environmental conditions and natural barriers formed at ca. 8000 B.P. could have produced independent and discontinuous developments among terrestrial hunter-gatherers on both sides of the Strait. However, the arrival at ca. 6500 B.P. of maritime specialized canoe people partially transformed biogeographic barriers at the Strait of Magellan into interaction zones.

Southern Patagonian and Fuegian Archipelago

As mentioned, the Pacific coast of southernmost Patagonia was peopled as early as 6500 years B.P. by maritime-adapted hunter-gatherer groups with navigation systems. Specialization is perceived both in subsistence and in technology. Three cultural traditions have been identified, with different time spans based on occupational sequences known for a

few localities in one of the regions, one of which, identified as the Otway Sea-Strait of Magellan, is recognized as an occupational core. Another core is located at the Beagle Channel. Coastal archaeology for the Otway Sea-Strait of Magellan is characterized by single-component archaeological sites from different periods within the Holocene. Consequently, the construction of occupation sequences has had to incorporate other scales of analysis focused on multiple short-occupation localities (e.g., bays, lagoon terraces, etc.) rather than depend on single sites with long stratigraphic chronologies. In localities such as Punta Santa Ana (Santa Ana Point, Strait of Magellan) and Pizzulic Bay on Englefield Island, it has been possible to make progress in building occupation sequences encompassing the Holocene from the study of various sites located in different geoform levels, such as sea shorelines and terraces. A framework that includes deposits ranging from the Middle to the Late Holocene has now been completed. The second core or node (Beagle Channel) is different, given that diachronic records



Figure 2. (a) Excavation view of site Punta Santa Ana 3; (b) general view of the site (Late Holocene terrace); (c) Pizzulic 2 site (Middle Holocene); and (d) excavation at Offing 2 site (lower terrace).

have mainly been supported by sequences built from lengthy single-site stratigraphic sequences (Legoupil and Fontugne 1997; Morello, Torres, et al. 2012; Orquera et al. 2011; San Román 2013).

Recent studies have focused on implementing new concepts and methodological approaches for questioning earlier interpretations related to diachronic processes of peopling by specialized maritime hunter-gatherer groups. Archaeological and geographical changes through time were considered only minor variations, within 6,000 years of what is seen as a homogeneous, durable, and stable system (Orquera et al. 2011).

Based on previous experience, geomorphological information, and knowledge of sea level variation during the Holocene, a research strategy was designed to uncover sequences of archaeological occupation, changing the scale from site to localities, such as bays and small islands in the Otway Sea-Strait of Magellan region.

Methodological approaches to reconstructing lithic and bone technology make use of the French prehistoric strategy known as *chaîne opératoire*. Analyses are focused on (a) objects and artifacts that can be traced to their source of origin or acquisition and that include processes of cultural interaction, mobility, transport, or exchange involving face-to-face relations; and (b) the search and reconstruction of complex technological procedures that can be attached to learning and teaching processes beyond simple observation and morphological copy. Our ultimate goal is to reconstruct the circulation of information over time and space by exchange or flow of ideas.

The zooarchaeological studies included diet reconstructions, discussion of hunting strategies, and the development of seasonality determinations for shellfish and fish species, both with partially positive results. Also, micromorphological analyses were conducted in some sites to better understand the formation and post-depositional processes.

Following the assumption that canoe groups set their camps near the coast, and correlating this with a dynamic shoreline during the Holocene, archaeological site distributions mainly responded to shoreline changes as affected by eustatic and isostatic processes. Thus, it follows that the marine hunter-gatherer camping places from different times were found in different geomorphological settings in a range of places within the Otway Sea-Strait of Magellan region (Figure 2). We recorded this in the three localities that we studied, Englefield Island, Punta Santa Ana, and Offing. Early sites (between 6500–5200 B.P.) are located over 10 m asl, the intermediate sites with chronologies between 5000–2500 B.P. are found between 8 and 4 m asl, and the later sites (less than 2000 years B.P.) under 3 m asl.

Changes in lithic technology and raw material exploitation, particularly green obsidian use, are evident in the archaeological record. Correlated shifts in bone technology and dominant weapon types were recognized. In general, changes oscillate from specialized marine hunters to broad spectrum adaptations, eventually shifting back to a cultural configuration associated with the material culture described for ethnographic groups in the region.

Information about subsistence strategies is also consistent with a trend toward the exploitation of marine resources, especially pinnipeds. Nevertheless, there is variation, such as important inflections in fishing tactics, ranging from specialization in deep water fish during early and intermediate periods to shoreline fishing during the last 2000 years.

The exploitation of birds shifts from a predominance of shags to an abundance of Procellari (e.g., albatross) forms in the intermediate period, and back to shags in later times. The latter is correlated with an important bone industry of short points made from bird diaphyses.

Chronological information indicates that there is no overlap between early and intermediate periods. Moreover, the evidence of interruption in the use and circulation of green obsidian during the intermediate period, plus a major technological shift in projectile point fabrication, has led us to suggest the existence of a peopling discontinuity in this region related to an external origin for the occupations between 5200 and 2500 years B.P.

From a general perspective, there is much more affinity between early and late cultural assemblages, the important message being that the cultural history of the area is more complex than previously envisaged.

Acknowledgments. Funding for this research was provided by grants FONDECYT N° 1085329 and 1060020.CD MAG0901 “Identidad del Fin del Mundo: Patagonia, Tierra del Fuego y Antártica.”

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REPORT FROM THE SAA BOARD OF DIRECTORS

Patricia A. Gilman

Patricia A. Gilman is the Secretary for the Society for American Archaeology.

The SAA Board of Directors met on April 15 and April 18, 2015 at the Annual Meeting in San Francisco, California. SAA President Jeffrey Altschul chaired the April 15 meeting and President-elect Diane Gifford-Gonzalez, Secretary Christina Rieth, Secretary-elect Patricia Gilman, Treasurer Jim Bruseth, and Directors S. Terry Childs, Chip Colwell, Suzanne Fish, Sarah Herr, Rodrigo Liendo, and Daniel Sandweiss were in attendance. SAA Executive Director Tobi Brimsek attended *ex officio*. Guests included incoming Directors John Douglass and Gordon Rakita and Treasurer-elect Deborah Nichols. SAA President Gifford-Gonzalez chaired the April 18 meeting, Secretary Gilman, Treasurer Bruseth, Treasurer-elect Nichols, Executive Director Brimsek, and Directors Childs, Colwell, Douglass, Liendo, Rakita, and Sandweiss attended.

President Altschul provided a brief summary of his written report to the Board, highlighting the accomplishments of the last year and adding updates to specific program areas. The SAA has had a particularly active year, especially in the areas of government and international government affairs, member services, and advocacy.

Government and international government affairs activities were summarized and discussed, highlighting specific Society accomplishments over the past year. An important aspect of this work has been advocacy for the protection of cultural resources both in the United States and abroad. The SAA has worked to support the protection of archaeological resources in the face of energy development as well as other land management issues. Task forces have addressed issues related to data quality and durability, regional land planning, and the value of archaeological resources. The SAA has also taken on consulting party status for several local/regionally important projects, including Amity Pueblo in Arizona, BLM Mancos Shale (around Chaco Canyon) in New Mexico, and the Desert Renewable Energy Conservation Plan (DRECP) in southern California.

The SAA's Government Affairs Committee (GAC) and the International Government Affairs Committee (IGAC) have contin-

ued to represent archaeology in state, federal, and international settings, advocating for the preservation of cultural remains and providing expertise when needed. The SAA has continued to engage Congress and work with other groups to advocate for cultural resource protection in a variety of settings. Among these groups is the Gas and Preservation Partnership (GAPP), an organization established for collaborative work between the energy industry and the preservation community to identify and properly manage historic and cultural resources as a result of energy development and exploration projects. Currently, the SAA is the only professional archaeological society that sits on its Board of Directors. The SAA has also become a consulting party in the development of a Memorandum of Agreement between the U.S. Bureau of Fish and Wildlife, the Arizona State Historic Preservation Office, the Arizona State Museum, and the affected tribes (Zuni, Hopi, Acoma, and Navajo) to resolve the effects of the Bureau of Fish and Wildlife's action at Amity Pueblo. Finally, the SAA has joined with other professional organizations to plan for the 50th Anniversary of the National Historic Preservation Act in 2016.

Internationally, IGAC has continued to monitor issues and write letters related to historic resources threatened by war or conflict as well as events relating to the trade in looted antiquities. IGAC has also been following projects in which cultural heritage is at risk as a result of development projects. Concerns over the lack of adequate compliance with cultural heritage policies prompted the Society to sponsor a 2014 meeting in Lima, Peru entitled "Improving Standards and Practices in Cultural Heritage Compliance" with the World Bank and the Inter-Development Bank. The purposes of the meeting were to open a dialogue about heritage preservation, to develop best practices, and to define standards of performance for cultural heritage compliance on bank-sponsored projects. The Lima meeting was followed by a meeting in Washington, D.C. Future meetings are necessary, and one will be scheduled as part of the next *Conferencia Intercontinental*. The SAA will seek Civil Society Organization status with the World Bank in order to attend their twice annual meetings of NGOs.



From left to right: Director Daniel H. Sandweiss; Treasurer Jim Bruseth; Director S. Terry Childs; Treasurer-elect Deborah L. Nichols; Director Rodrigo Liendo; Executive Director Tobi Brimsek; President Diane Gifford-Gonzalez; Director Gordon F.M. Rakita; Secretary Patricia A. Gilman; Director John G. Douglass; and Director Chip Colwell.

President Altschul discussed the Society's ability to communicate information about heritage protection. Issues related to National Science Foundation funding and heritage preservation in the Middle East have been communicated widely through newspaper articles and op-ed pieces with other organizations. Advocacy efforts to reverse the defunding of NSF are on-going, and greater dialogues with a wide audience are needed to convey why archaeological research is important and its impacts. Ideas for examining how proposals are written and conveying this information to the public were discussed.

Reality TV that focuses on metal detecting and archaeology continues to be an issue. Efforts to provide comments on The National Geographic Channel's *Diggers* show were noted.

Discovering the Archaeologists of the Americas (DAA) and the recently released Request for Proposal were discussed. DAA will provide information about the number and demographics of archaeologists working in the Americas. The pilot project will focus on one state and one Latin American country. The Board has designated the Executive Director to work with the task force to select a vendor.

Building on the success of the 2012 and 2014 *Conferencia Intercontinental*, the 2016 meeting will be held in Oaxaca, Mexico. In November 2015, the SAA will hold a joint thematic meeting with the European Association of Archaeologists (EAA) in Curaçao. The meeting will bring together leading scholars from the two organizations and others on the topic of slavery and colonialism. The conference arrangements are moving forward, and there were more than 120 abstracts submitted.

In the area of member services, the Board continued to support the SAA Online Seminar Series, commented on proposed regulations prepared by the National Park Service for the de-accessioning of federal collections, and oversaw the development of the Cheryl L. Wise Scholarship for undergraduate women pursuing a degree in archaeology in New Mexico. The SAA also continued to work with the National Science Foundation to investigate the disparity of grant proposal submission rates by gender and to find ways of increasing funding for archaeology.

Executive Director Tobi Brimsek summarized her written report and additions to it. She also discussed staff changes and activities.

80TH ANNUAL MEETING

The Annual Meeting had 32 concurrent sessions, and the exhibit hall was sold out, as was the CRM Expo. A total of 4,744 attendees registered in advance, and at that point San Francisco was already the largest meeting ever. As of Friday evening, there were 5,253 attendees registered. The Mobile App was up and running for the 2015 Annual Meeting. The call for the 2016 Annual Meeting has gone out.

Membership remains strong with 7,393 Society members for 2014. Our current membership for 2015 has already reached over 7,600 members.

The Online Seminar Series is going well, with upcoming seminars including topics related to hunter-gatherers in complex societies and heritage management in developing countries. Efforts to develop a seminar series for Latin American members are on-going.

The communication staff monitored communications at the Annual Meeting. Other areas of outreach will include efforts to expand communications through Twitter, Facebook, LinkedIn, and other types of social media. A two-year communication plan is being developed, and the Executive Director is working to find new ways to disseminate SAA's activities to a wider audience.

The Executive Director has been collecting information about how different presses bundle journals, possible publishing partnerships, and what impact this would have on the Society's journals.

Executive Director Brimsek provided an update on the Discovering of Archaeologists of the Americas RFP. The RFP may be retooled as an RFQ in the spring.

The Society hosted a reception for students on Wednesday night of the conference. The Executive Director completed fundraising in support of this event. Both President Altschul and Erin Baxter, chair of the Student Affairs Committee, spoke, and over 350 students attended.

Secretary Christina Rieth reported the results of the election. Deborah Nichols was selected as Treasurer-elect, and John Douglass and Gordon Rakita were elected Board members. Jane Eva Baxter and Sarah Sherwood were elected to the Nominating Committee. There were 8,820 ballots distributed, and 1,661 (18.8 percent) of the ballots were returned.

Treasurer Jim Bruseth reported on the SAA's current fiscal position and summarized his written report. The Society is in good financial shape with a \$1.8 million operating budget for 2015. This is up 8.5 percent from 2014 with our assets also increasing from 2014. The reserves continue to be strong and saw a greater than three percent increase over the past year.

The Society is working to increase its fundraising efforts for our scholarships targeted toward Native American and Historically Underrepresented Groups Scholarships (HUGS).

The Board considered several agenda items, including the allocation of FY 2014 surplus and endowment interest to the Technology Fund, Journal Start-up Fund, Communications Fund, Government Affairs Program Fund, and the HUGS Fund. The Board filled vacancies in Board liaison assignments and approved two membership surveys, one to determine why some members do not renew their memberships each year and the second to ask what members would like to see on the Archaeology for the Public webpages. It established the Teaching Archaeology Interest Group, the Cheryl L. Wase Scholarship Committee, the Climate Change Strategies Task Force, and the Task Force on Data Access and Archiving. The Board discussed the reports of the Task Force on Valuing Archaeological Resources, the Task Force on Archaeological Survey Data Quality, Durability, and Use, and the Task Force on Regional Planning. The Board approved an MOU between U.S. Committee of the Blue Shield and SAA. The Board will no longer restrict posting of Current Research Online to SAA members in order to serve the broader archaeological community.

The Board was joined by Jane Eva Baxter, Program Chair for the San Francisco meeting. President Altschul thanked her and the 2015 Program Committee for their outstanding work in organizing this year's program. At their suggestion, the Board created the Task Force to Standardize a Keyword List for Annual Meeting Submissions and requested that the Ethics Committee assist in reviewing some abstracts.

The Board selected Mexico as the host country for the third *Conferencia Intercontinental* and Oaxaca as the host city. Luis Borrero will be the Program Chair and Nelly Robles Garcia will be the local Advisory Committee Chair.

The Board had breakfast with the chairs of the SAA committees, task forces, and interest groups on Saturday, April 18. The Board discussed with the chairs the process for submitting reports and budget requests, the process for setting up fieldtrips and workshops for the annual meeting, the process for nominating members for awards, and the use of social media and the SAA's website to promote committee activities.

The Board was joined by Donn Grenda, chair of the Government Affairs Committee; Ian Lilley, chair of the International Government Affairs Committee; and David Lindsay, Manager, Government Affairs. The discussion focused on the Society's efforts to advocate for the protection of cultural remains within the Americas and abroad, on becoming consulting parties to government activities within the United States, becoming a

Civil Society Organization to multilateral financial institutions in developing countries, and coalition building with archaeological and other organizations that share our interests.

Ricky Lightfoot, chair of the Fundraising Committee, met with the Board and discussed how to construct a broad plan for fundraising. He mentioned developing a practice of giving in the Society, using case studies to show how donations are used, and publically recognizing donors.

The Board met with Dru McGill, chair of the Committee on Ethics, and heard a report on the committee's efforts to propose needed updates for the SAA's Principles of Archaeological Ethics. The Committee on Ethics is working with other SAA committees to determine areas of ethical concern, and the committee proposed a sponsored forum on current ethical issues and the SAA's Principles at the Orlando meeting.

During lunch on April 18, the Board met with Robert Kelly, incoming editor of *American Antiquity*, Geoff Braswell and Maria Gutierrez, co-editors of *Latin American Antiquity*, Anna Prentiss, editor of *The SAA Archaeological Record*, and Christopher Dore, editor of *Advances in Archaeological Practice*. Discussion focused on the status of the SAA publications.

The Board discussed the reports of the Task Force on Alternative Meeting Presentation Formats and the Poster Submission Task

Force. The Board aims to create new presentation formats and to increase the numbers of posters presented at the annual meetings. In terms of the former, there will be a trial set of lightning talks with time for discussion at the Orlando meeting. Also in Orlando, senior scholars will organize two poster sessions, and the Board is considering the possibility of putting posters online.

The Board discussed plans for its fall meeting, during which it will discuss budget requests for 2016.

The Board thanks out-going committee and task force chairs and SAA representatives for their service to the Society: Lynn Alex, Barbara Arroyo, Alex Barker, Erin Baxter, Jane Eva Baxter, Luis Jaime Castillo Butters, Doug Comer, Bill Doelle, Lynn Fisher, Ben Fitzhugh, Michael Glassow, Brett Houk, Keith Kintigh, Fred Limp, Maxine McBrinn, Francis P. McManamon, Deborah Nichols, Bonnie Pitblado, Julie Stein, Paul Welch, and Richard Wilshusen. The Board also thanks Ken Sassaman for his stellar service as *American Antiquity* editor. President Altschul acknowledged the contributions of outgoing Secretary Christina Rieth and Directors Suzanne Fish and Sarah Herr and thanked them for their exemplary service and contributions to the Society. The Board, in turn, thanked out-going President Jeffrey Altschul for his extraordinary service to the SAA and thereby to the field of archaeology.



SOCIETY FOR AMERICAN ARCHAEOLOGY

80TH ANNUAL BUSINESS MEETING

MINUTES OF THE MEETING

Christina B. Rieth

President Jeffrey Altschul called the Society for American Archaeology's 80th Annual Business Meeting to order at 5:07 PM on Friday April 17, 2015, after the Secretary determined that a quorum was present. He asked for the minutes of last year's Annual Business Meeting in Austin, Texas to be approved. The motion was moved, seconded, and approved by those members who were present.

President Altschul provided a summary of the previous year's activities. He thanked the Nominations Committee, chaired by Alex Barker, for their work for putting together an excellent slate of candidates. He thanked the outgoing members of the Board of Directors, including Secretary Christina Rieth and Directors Sarah Herr and Suzanne Fish, for their service to the Society.

The President thanked the Society's various committees, task forces, and interest groups for their work. He also thanked the chairs of the Society's committees and task forces, as well as the editor of *American Antiquity*, who are cycling off this year: Lynn Alex, Barbara Arroyo, Alex Barker, Erin Baxter, Jane Eva Baxter, Doug Comer, Luis Jaime Castillo Butters, Bill Doelle, Lynn Fisher, Ben Fitzhugh, Michael Glassow, Brett Houk, Keith Kintigh, Fred Limp, Maxine McBrinn, Francis P. McManamon, Deborah Nichols, Bonnie Pitblado, Ken Sassaman, Julie Stein, Paul Welch, and Richard Wilshusen.

He thanked Jane Eva Baxter (Program Chair) and Colin Busby (Local Advisory Committee Chair) and their respective committees for a successful Annual Meeting. The 2015 Annual Meeting was attended by more than 5,253 members making it the largest meeting in the history of the Society.

The President especially noted the excellent work of Executive Director, Tobi Brimsek, and the SAA staff, including David Lindsay, Cheng Zhang, Maureen Malloy, Liz Haberkorn, Jonathon Koudelka, Ahryel Tinker, Brianna Kelley, Elisabeth Herschbach, and Jason Epstein. The Society is extremely fortunate to have an exceptional professional staff.

President Altschul reviewed the Society's activities in Government and International Government Affairs, Member Services, and Communications. During the past year, the Society has worked to engage Congress and advocate for cultural resource protection by participating as a consulting party in the development of Memorandum of Agreements for a variety of undertakings including those related to Amity Pueblo in Arizona, the development of property within the Mancos Shale Deposit surrounding Chaco Canyon, and the Desert Renewable Energy Conservation Plan (DRECP) in California. The Board convened a Task Force on Valuing Archaeological Resources, a Task Force on Archaeological Survey Data Quality, Durability, and Use, and a Task Force on Regional Planning to provide the Board with guidance on the incorporation of landscapes as part of the National Historic Preservation Act compliance process. The Society has also partnered with other organizations in monitoring the effects of climate change on cultural resources, both in the U.S. and internationally. Finally, SAA has joined with other professional organizations to plan for the 50th Anniversary of the National Historic Preservation Act in 2016.

Internationally, the Society sponsored meetings in 2014 in Lima, Peru and Washington, D.C. on improving standards and practices in cultural heritage compliance with the World Bank and the Inter-Development Bank. The purpose of the meetings was to engage in a dialogue on current practice and to define standards of performance for cultural heritage compliance on bank-sponsored projects. In November 2015, the Society will host with the European Association of Archaeologists an organized joint meeting in Curaçao. The meeting, entitled "Connecting Contients: Archaeological Perspectives on Slavery, Trade and Colonialism," will bring together a group of international scholars from both sides of the Atlantic for discussions around this central theme. In 2016, the Society will sponsor the third *Conferencia Intercontinental* in Oaxaca, Mexico. The Society continues to advocate for the preservation of cultural resources threatened by conflict and those at risk as a result of the antiquities trade.

The President was happy to tell the membership that the SAA is fiscally healthy and the Board continues to identify areas in which member benefits could be enhanced. Currently, the Soci-

ety has more than 50 committees, task forces, and interest groups that serve the interests of the Society's membership. The Society continues to look for ways to disseminate information to a wider audience through print and digital media.

Jim Bruseth, Treasurer, reported that the Society is fiscally sound with a \$1.8 million operating budget for 2015. The Society's total assets have also increased over the past year with a portion of increased revenue earmarked for the Society's technology infrastructure. The Society's reserves continue to be strong with the current balance in the reserves at 101% of the operating budget. The balance in the reserves will allow the Society to weather changes in the economy as well as plan for major financial challenges on the horizon, especially those related to moving the Society's journals to open access. The Board of Directors voted at its fall 2014 meeting to make its journal *Advances in Archaeological Practice* available to all members with an eye toward eventually making it open access. The Board of Directors will continue to communicate with the membership in the future regarding this process. The Society will look to increase its fundraising activities for SAA scholarships, making Native American and Historically Underrepresented Groups Scholarships (HUGS) a priority.

Christina Rieth, Secretary, gave her report. She announced the results of the election: Deborah Nichols, Treasurer-elect, John Douglass and Gordon Rakita, Director Positions, Sarah Sherwood and Jane Eva Baxter as members of the Nominations Committee. 8,820 ballots were distributed to the membership in January 2015, and 1,661 (18.8%) were returned. This is slightly below that of the previous year.

Executive Director Tobi Brimsek provided a summary of the activities of staff over the past year and thanked Maureen Malloy, manager, Public Education; Liz Haberkorn, manager, Publications; David Lindsay, manager, Government Affairs; Cheng Zhang, manager, Information Services; Jason Epstein, manager, Membership and Marketing; Jonathan Koudelka, coordinator, Financial and Administrative Services; Ahryel Tinker, coordinator Membership and Meetings; Brianna Kelley, coordinator, Communications, and Elizabeth Herschbach, editorial specialist, for their work on behalf of the Society.

The Executive Director provided a summary of several of the Society's activities in 2014, including the development of the Online Seminar Series, the Society's advocacy in protecting cultural resources both in the U.S. and abroad, as well as the Society's efforts in responding the National Geographic Society's *Diggers* television show. The Executive Director continued by describing initiatives for the coming year, including the joint SAA and EAA thematic meeting in Curaçao in November 2015, as well as planning for the 2016 *Conferencia Intercontinental* in

Oaxaca, Mexico. The Executive Director concluded by thanking the Society for its work over the past year and encouraged the membership to attend the 81st Annual Meeting in Orlando, Florida. The submissions system for the Annual Meeting will open on May 4, 2015.

The membership was encouraged to download the SAA Meeting App for an opportunity to win a mini-Ipod. President Altschul drew the name for the mini-Ipod from those attending the Business Meeting.

President Altschul presented several Presidential Awards to acknowledge special contributions to the Society and to the field of archaeology. Presidential awards were presented to Willem Willems and Friedrich (Fritz) Lüth for their efforts in breaking down borders between the SAA and the EAA and encouraging joint current and future collaborations between the two organizations. Jane Eva Baxter was awarded a Presidential Award for her efforts in organizing the largest and most complex meeting in the Society's 80-year history. Brian I. Daniels and Salam al-Kuntar received awards for their effort to assist in the protection of cultural heritage sites ravaged by war in Syria, while Anibal Rodriguez received an award for his efforts to help scholars navigate North American archaeological collections at the American Museum of Natural History.

The President turned the program over to Desiree Martinez, who awarded the Arthur C. Parker Scholarship and the other Native American scholarships. Tiffany Tung, chair of the Historically Underrepresented Groups Scholarship (HUGS) Committee, followed and presented the Society's first Historically Underrepresented Groups Scholarship (HUGS) Awards. Included among the HUGS awards was an award presented by the Institute for Field Research for field training.

President Altschul presented the remaining awards and fellowships. Included among these awards was the 2015 Lifetime Achievement Award, which was presented to Dr. Bruce Smith for his scholarly achievements, his contributions to the Society, and contributions to the profession of archaeology. Dr. Smith thanked the Society for the award and reaffirmed its (and the Annual Meetings) importance to the membership. The President thanked the members of the awards committees who do the work of choosing deserving individuals for each award. The citations of all Awards and Scholarships follow this report.

The President then asked the membership if there is any new business. Hearing no new business, he asked for the presentation of the ceremonial resolutions. The ceremonial resolutions were read by Dean Snow, chair of the Ceremonial Resolutions Committee. The first resolution thanked the retiring members of the Board of Directors, President Jeffrey Altschul, Secretary

Christina Rieth, and Directors Suzanne Fish and Sarah Herr. The resolution then thanked the SAA staff and especially Tobi A. Brimsek, the Executive Director, who planned the meeting, and all the volunteers who worked at Registration and other tasks; the Program Committee, chaired by Jane Eva Baxter, assisted by Shaza Wester Davis and Members of the Program Committee Mitch Allen, Traci Ardren, Caryn M. Berg, Mary Jane Berman, Bradley Chase, Zoë Crossland, Sarah Croucher, Kristin De Lucia, Colleen Delaney, Ronald K. Faulseit, Jr., Meredith Ellis, Jacob Fisher, Lisa M. Fontes, Perry L. Gnivecki, Mark Hylkema, Morag M. Kersel, Amanda L. Logan, Jeanne Lopiparo, Christopher Milan, John W. Norder, Tricia E. Owlett, William A. Parkinson, Megan A. Perry, Paula Porubcan, Gordon F. M. Rakita, Charles R. Riggs, Yorke Rowan, Rachel E. Scott, David B. Small, Travis W. Stanton, Sarah L. Surface-Evans, John J. Taylor-Montoya, Clare Tolmie, Melissa A. Vogel, Megan Victor, Elizabeth L. Watts, as well as the Annual Meeting Local Advisory Committee, chaired by Colin I. Busby. Committee chairs and members completing their service as well as the many members who have served the Society on its committees and in other ways were thanked. Sincere wishes were expressed that those members who are now serving in the armed forces return safely.

A resolution of sympathy was extended to the families and friends of Dan Roberts, Clay Patton, Mark Lynott, Don Weaver, Clyde Snow, Ndeye Sokhna Gueye, George Armelagos, George Stuart, William Cremin, Diane Pritchard, Larry Agenbroad, Joseph M. Verbka, Hester Davis, Robert McGimsey, Willem Willems, Patricia Parker, Harold Adelson, Keisan Griffith-Roberts, Bill Baxter, Kelly James Schroeder, James Ayres, Peter Furst, John Clegg, David Peacock, and Sarah Bridges. The members in attendance rose for a moment of silence in honor of our departed colleagues.

President Altschul thanked the outgoing committee chairs and the outgoing Board members. The President also thanked the Executive Director and the SAA staff for their hard work on behalf of the Society.

In his concluding remarks, President Altschul indicated that it had been a pleasure to serve the Society as President and thanked archaeologists, including Hester Davis and Charles McGimsey, who came before him and for their efforts in creating the historic preservation framework that guides much of American archaeology in the 21st century. He urged the membership and the Board to continue to protect these resources into the future. The President then introduced in-coming President Diane Gifford-Gonzalez.

President Gifford-Gonzalez thanked the out-going President and acknowledged his exceptional contributions and efforts in the arena of heritage management over the past two years. She

expressed her gratitude to the Society and her predecessors for the opportunity to serve as president and reaffirmed her interest in making the SAA inclusive and representative of archaeologists from diverse backgrounds. She thanked the Society for this honor and looked forward to serving the membership in the future.

A motion to adjourn was presented at 6:43 pm. The motion was seconded and the meeting was adjourned.

REPORT OF THE PRESIDENT

Jeffrey Altschul

I want to thank the Nominating Committee, chaired by Fred Limp, for an outstanding slate of candidates, and to thank all the candidates, both those who were elected and those who were not, for their exemplary willingness to serve the Society. I also want to acknowledge and thank our outgoing officers and Board members, Christina Rieth—Secretary, Sarah Herr—Director, and Suzanne Fish—Director.

SAA is in excellent shape. Our finances have never been better. Our journals are all on schedule, publishing interesting and important articles. And, as you can see from this meeting, archaeologists really like to come to our meetings.

SAA is relevant in a way it hasn't been for some time. In the United States, Federal agencies are asking the Society to weigh in on issues such as the incorporation of cultural resources in regional plans, how to assess survey data quality and durability, and incorporating heritage values in landscape-scale resource management. Tribes have asked us to join with them to ensure that archaeological and sacred sites are treated appropriately. And, development banks are seeking our counsel on how best to implement their cultural heritage safeguards in developing countries.

SAA also is launching a series of new initiatives. We are about to embark on the Discovering the Archaeologists of Americas pilot program. We have established a new task force to guide how the Society will engage in the various topics involved with climate change. Here in California, we have signed on as consulting parties to the Desert Renewable Energy Conservation Plan, which covers about 22.5 million acres and more than 10,000 archaeological sites. We are actively planning to celebrate the 50th anniversary of the National Historic Preservation Act. And, we are joining the European Association of Archaeology to host the thematic conference *Connection Continents: Archaeological Perspectives on Slavery, Trade, and Colonialism*, to be held in November 2015 in Curaçao.

We have done much, but there is more to do. Today, there are more than 7,600 SAA members. I estimate that there are another 2,500 or so archaeologists in the United States that have been members in the SAA in the last 3 years. So at any one time there are about 10,000 archaeologists who are or have been SAA members, which constitutes the bulk of all archaeologists working in the United States. Many of these archaeologists, as well as those in Latin America and elsewhere, would like to remain consistent SAA members. Our job is to make sure that they find the SAA of relevance to their concerns, be it research opportunities, career advancement, or social justice.

Much of the work of making SAA relevant falls to the committees and task forces that drive the Society forward. As President, I have often asked for volunteers to study a particular topic or produce a report on an issue facing American archaeology. For the most part, everyone I ask wants to help. Some can't because their schedules will not allow, but even in these cases, many members rearrange their work to help. It has been a great joy and a humbling experience to watch our members take on a task. It is with these thoughts in mind that I want to thank the Committee Chairs and Task Force Chairs who are cycling off this year. They are:

Lynn Alex	Brett Houk
Barbara Arroyo	Fred Limp
Alex Barker	Maxine McBrinn
Erin Baxter	Francis P. McManamon
Jane Baxter	Deborah Nichols
Luis Jaime Castillo Butters	Bonnie Lynn Pitblado
Bill Doelle	Julie Stein
Lynn Fisher	Paul Welch
Ben Fitzhugh	Richard Wilshusen
Michael Glassow	

Also, leaving his post as editor of *American Antiquity* is Ken Sassaman.

We owe all of them a great deal for their service.

I am very pleased to announce that we have 5,253 registered for this meeting. That makes this the largest meeting of all time. The meeting's success is the result of many people's hard work. We need to thank Program Chair Jane Eva Baxter and her committee and Local Arrangements Chair Colin Busby. We must also acknowledge with gratitude the work of SAA's Executive Director, Tobi Brimsek, and the SAA Staff:

Jason Epstein, manager, Membership and Marketing
Liz Haberkorn, manager, Publications
David Lindsay, manager, Government Affairs
Maureen Malloy, manager, Education and Outreach

Cheng Zhang, manager, Information Services
Brianna Kelley, coordinator, Communications
Jonathon Koudelka, coordinator, Financial and Administrative Services
Ahryel Tinker, coordinator, Membership and Meetings
Elisabeth Herschbach, editorial specialist

The Society is extremely fortunate to have a truly exceptional professional staff. It is a pleasure to see the combination of their professional experience and skills and the superb volunteerism and capabilities of the membership working together.

In closing, I want to again say thank you to the outgoing Chair and Task Force Chairs, and to the three outgoing Board members, Christina Rieth, Sarah Herr, and Suzanne Fish, for their contributions and hard work. It has been a pleasure to serve with them, and I know you all appreciate their excellent service to the SAA. Of course this job would be impossible without the assistance of Tobi Brimsek and the SAA staff. We are lucky to have them and I want to acknowledge their hard work and selfless service.

And now to the part of the show that we have all been waiting for, no one more than me. It's been a great honor to serve as President of the SAA. As a contract archaeologist, it never occurred to me that I could be elected to this position. It is certainly not something I ever aspired to. But I've had a great career. I know that I owe that career to people like Hester Davis, Bob McGimsey, Bill Lipe, Don Fowler, and others, who worked really hard, even though they gained little personally, to create the historic preservation framework that allowed me and others to stay in archaeology and thrive. I contemplated running for President because I felt this framework was in jeopardy in the United States and pretty much nonexistent or in tatters in many other countries. In the last two years, I've spent a lot of time doing what I could to strengthen these frameworks and to improve the opportunities they might provide to archaeologists. I know I could have done better, but I did my best. And in some small way I hope I have paid my debt forward. I'm a big believer in the Dean Snow school of service: if you're not having fun, you're not doing it right. And, by that measure, I can say unequivocally that I and this Board were a tremendous success.

I was probably one of the few archaeologists that didn't know Diane when she was elected President. Over the last year, I've come to know her as a really smart, strong person. She's funny and kind hearted; most of all, she is a good person. Diane has a good idea of where she wants to take the Society and how to get there, and I for one am looking forward to great things occurring at SAA over the next few years. So without further ado, it is my distinct privilege and great honor to introduce you to the next President of the SAA: Diane Gifford-Gonzalez.

REMARKS FROM THE INCOMING PRESIDENT

Diane Gifford-Gonzalez

At the risk of seeming a little too much like Sergeant Pepper's Lonely Hearts Club Band, it was 42 years ago this month that I attended my first SAA Annual Meeting, here in San Francisco, as a graduate student from UC Berkeley. Although I was an Africanist, I foresaw the scholarly advantages of meeting with archaeologists with diverse geographic and theoretical perspectives, and I was interested in this new thing called "Cultural Resource Management," and what it might imply for archaeological practice.

Since then, I have joined other professional archaeological associations and served as an officer for several of them, but SAA has always been the Mother Ship to which I returned for intellectual invigoration, and for challenges to my thinking about archaeology. I am still an Africanist, but I also work in California, and SAA is still my primary home, for all those reasons.

I never in a million years thought I would be asked to run for SAA President. When that happened, I was humbly aware that I would be embarking on a path trodden by great archaeologists who have always looked beyond their immediate communities, to ask what else archaeology could be, and to—and for—whom?

From our founding ancestor Arthur C. Parker, to those who have recently passed over, such as Hester Davis and Bob McGimsey, I saw that they'd set a wider definition of archaeology—and that the bar has also been set quite high, as the contributions of my immediate predecessor indicate.

I will do my best to follow the paths opened by our past presidents, to represent the Society and its members' interests, to defend archaeological heritage, to sustain our communications with diverse Native American constituencies, to continue outreach to Latin American and other archaeologists outside North America, and to facilitate the entry of young people from diverse backgrounds into archaeology in general. When I was asked to run, what reassured me, and now that I have served a year as President-Elect, what I am completely confident about, is that the Society is extraordinarily well served by its dedicated volunteers on its committees, taskforces, and interest groups.

Please do feel free to communicate with me about any matters of concern, recalling always that the President presides rather than votes! *Además, si hay colegas a quienes les conviene más comunicarse conmigo—o con Tobi Brimsek—en español castellano, por favor, siéntanse Ustedes libres de hacerlo, gracias.* Thank you for this honor, and I look forward to serving you.

SAA 2016 CALL FOR NOMINATIONS

The 2016 Nominating Committee of the Society for American Archaeology requests nominations for the following positions:

President-elect (2016–2017) to succeed to the office of President (2017–2019)

Secretary-elect (2016–2017) to succeed to the office of Secretary (2017–2019)

Board of Directors member, Position 1 (2016–2019), replacement for current member, S. Terry Childs

Board of Directors member, Position 2 (2016–2019), replacement for current member, Rodrigo Liendo

Nominating Committee member, Member #1 (2016)

Nominating Committee member, Member #2 (2016)

If SAA is to have effective officers and a representative Board, the membership must be involved in the nomination of candidates. Members are urged to submit nominations and, if they so desire, to discuss possible candidates with the 2016 Nominating Committee Chair Fred Limp (flimp@uark.edu).

Please send all nominations, along with an address and phone number for the nominated individual, to:

Chair, 2016 Nominating Committee

c/o SAA Executive Director

111 14th Street, NW Suite 800

Washington, DC 20005

Or fax to: 202-789-0284

Or email to: tobi_brimsek@saa.org

Please note that nominees must be current members of SAA. Nominations must be received no later than September 1, 2015.



2015 AWARDS

SAA award recipients are selected by individual committees of SAA members—one for each award. The Board of Directors wishes to thank the award committees for their hard work and excellent selections, and to encourage any members who have an interest in a particular award to volunteer to serve on a future committee.

PRESIDENTIAL RECOGNITION AWARD



WILLEM WILLEMS

Willem Willems served as a guiding light in the development of cultural heritage management throughout the world. As president of the EAA in the late 1990s, Willems tried to reach across the ocean and engage the SAA in a joint meeting. This vision will finally be realized in the joint EAA-SAA meeting *Connecting Continents: Archaeological Perspectives on Slavery, Trade, and Colonialism* in 2015. Willems served until his untimely death as chair of the Scientific Program Committee for the joint meeting, arranging for the keynote speakers, working on local arrangements and excursions with the National Archaeological-Anthropological Memory Management (NAAM) on Curacao, assisting in the Call for Submissions, and helping to develop the scientific program. Although he did not live to see it, his vision of cross-fertilization between members of the EAA and the SAA will bear fruit and live on.

members of the EAA and the SAA will enjoy the ability to share research, ideas, and good friendships for years to come.

PRESIDENTIAL RECOGNITION AWARD



JANE EVA BAXTER

The 2015 SAA Annual Meeting is the largest and most complex meeting in the Society's 80-year history. Jane Eva Baxter had more than 3,800 presentations to vet, order, and schedule along with meetings of more than 50 committees, task forces, and interest groups, as well as ancillary outside groups that request conference rooms during the annual meeting. Jane handled the pressure, worked with SAA staff, and engaged with members disappointed about the schedule with grace and dignity.

PRESIDENTIAL RECOGNITION AWARD



BRIAN I. DANIELS

Brian I. Daniels is one of the leaders of the Penn Cultural Heritage Center and Smithsonian Institutions' efforts to assist Syrian archaeologists, museum curators, and heritage experts in the protection of archaeological and other cultural assets inside Syria. Since February 2013, the team has been working with Syrians to protect archaeological sites and materials from the ravages of war. They have held training sessions as well as visiting markets in Turkish border towns, where they have purchased curation materials to send back into the country with the Syrians so that they could pack and protect items in hiding places conducive to long term storage. The curators at the Ma'arra Museum, bombed by the Syrian government and attacked by ISIS, contin-

PRESIDENTIAL RECOGNITION AWARD



FRIEDRICH (FRITZ) LÜTH

As president of EAA, Friedrich (Fritz) Luth seized the opportunity to break down borders between European and American archaeologists by helping to conceive and implement the joint EAA-SAA thematic meeting, *Connecting Continents: Archaeological Perspectives on Slavery, Colonialism, and Trade*. Even after his terms as president of EAA was complete, Fritz agreed to serve as acting co-chair of the Scientific Program Committee in the wake of the untimely death of Willem Willems. Largely due to his efforts,

ue to receive advice and encouragement from Daniels and others on the protection of collections, and due to the team's efforts, there is hope that some of Syrian's past will be saved.

PRESIDENTIAL RECOGNITION AWARD



SALAM AL-KUNTAR

As a Syrian archaeologist who worked for the Ministry of Antiquities, Salam al-Kuntar was forced to flee her homeland in 2012. Although she was able to secure a position at the University of Pennsylvania, she never forgot the archaeologists and the sites she left behind. She founded the Safeguarding the Heritage of Syria initiative and has worked tirelessly to connect Syrian archaeologists with colleagues outside the country that can provide assistance in training, materials, and expertise in conservation, preservation, and curation. She has participated in training sessions in the region and assisted in obtaining curation materials to send back into Syria. She has given voice to the voiceless; writing articles, letters, and op eds as well as giving lectures and appearing on radio and other media. In no small part, her dogged efforts will ensure that some of Syria's illustrative past is saved.

PRESIDENTIAL RECOGNITION AWARD



ANIBAL RODRIGUEZ

For nearly forty years, Anibal Rodriguez helped hundreds of scholars navigate the North American archaeological collections as Senior Research Technician at the American Museum of Natural History. From the most senior distinguished scholar to students working on their first research project, he has served the profession through his voluminous knowledge of the collections, his willingness to come early and stay late to facilitate research, his unflagging energy in tracking down artifacts and archives, and his sense of humor through it all. His inspired collections assistance has been acknowledged in dozens, perhaps hundreds, of trade books, dissertations, and professional journals. Anibal made sure that every researcher had the time, the space, and the access to conduct their research. Although his recent retirement means that we may see less of Anibal, there is no way to measure the impact his hard work over the last forty years has had on the profession.

GENE STUART AWARD



ANDREW LAWLER

Andrew Lawler, an award-winning science writer and correspondent for *Science* magazine, has earned the 2015 Gene S. Stuart Award for his ethically responsible and original story about the early maritime exploits of the Indian Ocean. "Sailing Sinbad's Seas" presents an engaging story about how archaeologists are studying ancient East-West trade relations. Shifting their focus from ancient Rome and China, cross-disciplinary researchers are exploring coastal swamps in Southeast Asia, beaches in Africa, and coral reefs near Sri Lanka with the goal of better understanding this important and expansive trade network. Andrew Lawler has delivered to the public a well-balanced article detailing the pursuit of the past in a way that all archaeologists can respect.

GEOARCHAEOLOGY INTEREST GROUP M.A./M.S. RESEARCH AWARD



ALEXANDER DELGADO

DIENJE KENYON FELLOWSHIP

ALLISON L. WOLFE

FRED PLOG MEMORIAL FELLOWSHIP

SAUL L. HEDQUIST

DOUGLAS KELLOGG FELLOWSHIP

BRYN LETHAM

**ARTHUR C. PARKER SCHOLARSHIP FOR
ARCHAEOLOGICAL TRAINING FOR
NATIVE AMERICANS AND NATIVE HAWAIIANS**



BRITTNEY DIESBOURG

**NSF SCHOLARSHIPS FOR ARCHAEOLOGICAL TRAINING
FOR NATIVE AMERICANS AND NATIVE HAWAIIANS**

ALICIA GOODEN

**NSF SCHOLARSHIPS FOR ARCHAEOLOGICAL TRAINING
FOR NATIVE AMERICANS AND NATIVE HAWAIIANS**



KIRSTEN GREEN

**NSF SCHOLARSHIPS FOR ARCHAEOLOGICAL TRAINING
FOR NATIVE AMERICANS AND NATIVE HAWAIIANS**

ANITA JOHNSON-HENKE

**NSF SCHOLARSHIPS FOR ARCHAEOLOGICAL TRAINING
FOR NATIVE AMERICANS AND NATIVE HAWAIIANS**

REGINA MAD PLUME

**NSF SCHOLARSHIPS FOR ARCHAEOLOGICAL TRAINING
FOR NATIVE AMERICANS AND NATIVE HAWAIIANS**

PETER NELSON

**SAA NATIVE AMERICAN UNDERGRADUATE
ARCHAEOLOGY SCHOLARSHIP**

GREY DON JOHNSON

**SAA NATIVE AMERICAN GRADUATE ARCHAEOLOGY
SCHOLARSHIP**



GARRETT W. BRIGGS

**HISTORICALLY UNDERREPRESENTED GROUPS
SCHOLARSHIP (HUGS)**



DANIA JORDAN

**HISTORICALLY UNDERREPRESENTED GROUPS
SCHOLARSHIP (HUGS)**



GABRIEL SANCHEZ

**HISTORICALLY UNDERREPRESENTED GROUPS SCHOL-
ARSHIP (HUGS)- INSTITUTE FOR FIELD RESEARCH (IFR)
SCHOLARSHIP**

SAMEEN MANSOOR

DISSERTATION AWARD



ALAN FARAHANI

Dr. Alan Farahani has won the 2015 SAA Dissertation Award for his dissertation entitled “Sustaining Community under Empire: An Archaeological Investigation of Long-Term Agricultural Production and Imperial Interventions at Dhiban, Jordan, 1000 BCE - 1450 CE,” completed in 2014 in the interdisciplinary program in

Ancient History and Mediterranean Archaeology at the University of California, Berkeley. This outstanding dissertation investigates the responses of local agricultural communities to imperial taxation and extraction regimes of the Byzantine and Mamluk Empires. By integrating excavation data, analysis of paleobotanical materials, and paleoenvironmental proxies, Farahani documented how communities at Dhiban exercised agency in their choices of agricultural crops, the composition of fields, and the organization of agricultural labor, responding distinctly to each imperial regime. With his sophisticated and nuanced arguments, Farahani’s outstanding dissertation makes significant contributions to our knowledge of the ancient Near East, while advocating for a new socioecological approach to ancient ecological dynamics.

BOOK AWARD: SCHOLARLY CATEGORY



STEVEN A. WERNKE

Steven A. Wernke’s book “Negotiated Settlements: Andean Communities and Landscapes under Inka and Spanish Colonialism” is a superb work that bridges the divide between late prehistoric and early colonial times in one Andean valley. Its central endeavor is a nuanced investigation of how colonial strategies are negoti-

ated on the ground in local communities through spatial practices of architecture, settlement patterns, and land use. Tacking between different scales of archaeological investigation, applying ingenious and creative GIS analyses, and deftly integrating evidence from early documents, Wernke achieves a fine-grained and compelling exposé of the spaces that shaped every-day, lived inequality over the course of five centuries and two imperial regimes. The result is an outstandingly effective study of “landscape” as structured by human action and structuring of human possibilities. This elegantly written and generously illustrated book forms an exceptional model for studying the interface of local and imperial processes and for understanding lived landscapes through time.

BOOK AWARD: PUBLIC AUDIENCE CATEGORY



**DIMITRA PAPAGIANNI AND
MICHAEL A. MORSE**

In “The Neanderthals Rediscovered: How Modern Science is Rewriting their Story,” authors Dimitra Papagianni and Michael A. Morse give an excellent overview of recent Middle Paleolithic and Neanderthal findings. Aimed at an educated lay audience,

the book presents a trove of information on this ever-fascinating topic in lively, highly readable prose and well-selected images. Piquing curiosity but never misleading, the authors guide the reader through the origins, lives, extinction, and modern representation of our Neanderthal relatives with confidence and verve, and they take a sensible, even-handed approach to controversial topics. Our high praise goes to this well-produced book that strikes an excellent balance between broad popular appeal and satisfyingly rich content.

AWARD FOR EXCELLENCE IN ARCHAEOLOGICAL ANALYSIS



BARBARA J. MILLS

Barbara J. Mills has earned the SAA’s Award for Excellence in Archaeological Analysis for her scholarly breadth and path-breaking research in the field of ceramic analysis. Dr. Mills’ work has spanned a remarkable spectrum of topics and issues, from her influential early publications on core interpretive problems of

ceramic assemblage formation, to technical studies of ceramic production, sourcing, and causes of stylistic variation. Dr. Mills has long been at the vanguard of scholars using ceramic data to address social questions, including issues of gender, identity, social competition, and inequality in the prehistoric Southwest. Most recently, she has used ceramic data to explore modes of interaction, migration, and social resistance among prehispanic populations and communities within a regional-scale network analysis. Throughout her exemplary career, Dr. Mills has elevated the study of archaeological ceramics to the highest order of anthropological inquiry, and she stands as a model and inspiration to the discipline.

AWARD FOR EXCELLENCE IN PUBLIC EDUCATION



KANSAS ARCHEOLOGY TRAINING PROGRAM

For over 40 years, the Kansas Archeology Training Program (KATP) has linked professional archaeologists with members of the public, local communities, and descendant peoples to understand, document, and protect archaeological sites, and to salvage endangered ones. This has been accomplished through a partnership between the Kansas Anthropological Association and the Kansas Historical Society. Integral to the program are a regularly scheduled field school that engages thousands, and a Certification Program that has graduated close to 400 experienced avocational archaeologists who are frequently called upon to assist archaeological projects. While not the first, the KATP stands out for its longevity, scope, consistency, and reliability. Its systematic and sustained efforts have created a strong community of informed citizens who appreciate and advocate for archaeology and cultural resource studies. Advocacy at this scale is highly deserving of recognition with the 2015 Award for Excellence in Public Education.

CRABTREE AWARD



TOM MIDDLEBROOK

Tom Middlebrook has earned the SAA's Crabtree Award for his outstanding record of furthering archaeological research on contact between the Hasinai or East Texas Caddo and French and Spanish colonial representatives in "Deep East Texas." He has carried out extensive fieldwork at Caddo, Spanish, and French colonial sites and contributed his findings to technical reports and numerous professional publications and conferences (including SAA meetings). He has also variously founded, supported, and led the East Texas Archaeological Society, the Nacogdoches County Historical Association, and the Nacogdoches County Historical Commission. His reach extends well beyond his Nacogdoches hometown, however, as a member and past president of the Dallas and Texas Archeological Societies; as a longtime contributor to the Caddo Conference Organization; and as a 25-year member and officer of the Texas Archeological Stewardship Network. Tom Middlebrook's avocational career is rich and diverse, clearly embodying the across-the-board contributions of the award's namesake, Don Crabtree.

THE FRYXELL AWARD FOR INTERDISCIPLINARY RESEARCH



DAVID HURST THOMAS

David Thomas earns the SAA's Fryxell Award for Interdisciplinary Research for his combination of cross-disciplinary scholarship, leadership in public education, and committed service to the profession. Through his long and productive career, Dr. Thomas has pioneered research in the interdisciplinary spirit, incorporating human biology, history and ethnohistory, experimental archaeology, paleoethnobotany, zooarchaeology, geoarchaeology, remote sensing, and quantitative methods. He has published widely on this work, ranging from the Great Basin Archaic to the early Colonial Contact period interactions in coastal Georgia and the Desert Southwest. His textbooks have been staples in the archaeological education of two generations of American students. He is widely respected for his engagement with descent communities, his authorship of several award-winning popular books on colonial impacts and entanglements with Native America, and his service on numerous editorial boards, museum boards, and professional committees.

PUBLIC SERVICE AWARD

GLENN MORGAN

In his position at the World Bank, Glenn Morgan has been instrumental in advancing and promoting cultural heritage compliance by multi-lateral financial institutions around the world. Glenn's participation in the SAA-sponsored workshop, *Improving Standards and Practices of Cultural Heritage Compliance in Latin America*, provided Latin American archaeologists and cultural heritage specialists a face and a voice to a seemingly inapproachable institution which is responsible for an increasing amount of cultural heritage activities in Latin America. He also provided SAA a platform from which to address other multi-lateral financial institutions. Importantly, Glenn has promised to remain engaged with the cultural heritage community as we move forward.

PUBLIC SERVICE AWARD



ARLENE FLEMING

As a Cultural Resource and Development Specialist for the World Bank, Arlene Fleming has served a crucial role in the advancement of bank cultural heritage policy and compliance. She clearly articulated bank policy during her presentation at the SAA-sponsored workshop, *Improving Standards and Practices of Cultural Heritage Compliance in Latin America* in Lima, Peru. She also has on numerous occasions assisted the SAA in navigating the structure of the World Bank, the direction the bank is trending with regard to environmental and social safeguards, and the best strategy of engagement for advancing cultural heritage.

PUBLIC SERVICE AWARD

JONATHAN RENSHAW

In his position at the Inter-American Development Bank (IDB), Jonathan Renshaw has been instrumental in advancing and promoting cultural heritage compliance in Latin America. John was an early and enthusiastic supporter of the SAA-sponsored workshop, *Improving Standards and Practices of Cultural Heritage Compliance in Latin America*. At the workshop, he provided Latin American archaeologists and cultural heritage specialists a face and a voice to an institution which is responsible for an increasing amount of cultural heritage activities in Latin America. He came out of retirement to ensure that the IDB cultural heritage guidance note was completed. SAA is grateful for Jonathan Renshaw for allowing us to comment on various drafts of the guidance note and continue to benefit from his advice on how to see the guidance note implemented.

PUBLIC SERVICE AWARD

ELSA CHANG

Trained as an archaeologist, Elsa Chang has a unique and critical position at the Inter-American Development Bank (IDB). She is responsible for ensuring that IDB projects meet the bank's cultural heritage compliance standards. She participated in the SAA-sponsored workshop, *Improving Standards and Practices of Cultural Heritage Compliance in Latin America*. She also has met on several occasions with SAA, offering advice on how best to engage the IDB and to advance cultural heritage compliance on bank projects in Latin America. Often in the face of strong odds, Elsa remains a strong proponent of cultural heritage and a good friend to SAA and Latin American archaeologists.

AWARD FOR EXCELLENCE IN LATIN AMERICAN AND CARIBBEAN ARCHAEOLOGY



JEFFREY PARSONS

Jeffrey Parsons deserves the Award for Excellence in Latin American and Caribbean Archaeology for his combination of scholarship, service to the profession, and academic influence on colleagues all over the Americas. Dr. Parsons' long-lasting contributions to Mexican and Peruvian archaeology extend back more than four decades and include ground-breaking fieldwork and research that helped shape the entire discipline, in theory and methodology. His approaches to ethnoarchaeology, and especially his development of methods for regional and systematic settlement pattern surveys, have had profound and widespread implications in the practice of archaeology, becoming the standard for such research. Dr. Parsons is a prolific author with a wide impact on his audience, as well as a model collaborator with fellow Latin American archaeologists, furthering local research and training wherever he has worked. He is an established indefatigable investigator and an accomplished teacher whose work is an inspiration to students and professionals alike.

LIFETIME ACHIEVEMENT AWARD



BRUCE D. SMITH

Bruce D. Smith is the recipient of the 2015 SAA Lifetime Achievement Award, the most prestigious award the Society offers. There are few archaeologists who can match Smith's remarkable record of scholarly achievements, his outstanding contributions to the SAA, and his contributions to the profession of archaeology. His research has continually pushed the fields of archaeology, human behavioral ecology, and anthropology in new directions, as well as having lasting impact. Smith is committed to demonstrating the importance of archaeological research to the general public. He has served the SAA and the profession in many different capacities over the years, giving tirelessly of his time and talents in ways that have advanced the goals of the Society and championed the importance of the discipline within the broad international research community. In his many past and ongoing contributions to the discipline he has clearly achieved the stature worthy of the Society's highest award.

**PRESENTED AT THE SAA AWARDS CEREMONY:
THE SCHOOL FOR ADVANCED RESEARCH (SAR)
LINDA S. CORDELL PRIZE**

JULIA A. HENDON

STUDENT POSTER AWARD



JENNA KAY CARLSON

This year's SAA Student Poster Award is presented to Jenna Kay Carlson of the College of William and Mary for her poster "Oxen at Oxon Hill Manor: Identifying Draught Cattle from the Archaeological Record of Colonial Maryland." Carlson's research marks an important step in bringing methodologies developed and tested in Europe to the fore in zooarchaeological analyses of New World assemblages. Carlson argues in her poster that, by identifying and understanding the many roles that animals played at colonial North American sites, we can better understand the intricacies of the plantation landscape. The study is important because of its ability to identify draught animals in the archaeological record, and increased application of the methods can help to verify the claims made in the historic documents of the increased importance of draught oxen throughout the 18th century as the agricultural economy shifted from tobacco cultivation to the production of ancillary crops.

STUDENT PAPER AWARD



CATRINE JARMAN

Through her well-reasoned and methodologically sound paper "Female Mobility in the Viking Worlds," Catrine Jarman of the University of Bristol contributes to ongoing debates about women's roles in Viking Age Northern Europe and to broader discussions of gender in archaeology. Jarman's stable isotope analysis of 37 Viking Age burials from Norway is thoughtfully framed in a broader comparison of published strontium and oxygen isotope data from across the North Atlantic. Drawing on insights from archaeological and historical evidence, Jarman argues convincingly for high levels of mobility among Viking Age women. The isotopic analysis provides the first direct evidence of female mobility into Norway from elsewhere in the Viking worlds and contributes to emerging discussions about women's roles and agency in Viking Age society.

STUDENT PAPER AWARD—HONORABLE MENTION



KATHRYN FREDERICK

The SAA presents an Honorable Mention in the Student Paper Award competition to Kathryn Frederick of Michigan State University for her paper "Holes: The Beginner's Guide to Food Caching." Frederick's interesting and original experimental study replicates Late Precontact period subterranean storage pits to assess the reliability and efficiency of food storage in the Great Lakes region. An effective research design including three successive trials and subsequent tests for food safety produced new insights about the importance of timing and monitoring in subterranean caching. Frederick's engagingly presented work makes a significant contribution to understanding an under-researched but important type of archaeological feature.

**INSTITUTE FOR FIELD RESEARCH UNDERGRADUATE
STUDENT POSTER AWARD**



JESSICA-LOUISE MCNEIL

For her excellent poster on the use of objective color quantification techniques to refit lithic assemblages, we present the IFR Undergraduate Poster Award to Jessica-Louise McNeil. Her poster uses Color Signature Analysis to facilitate the refitting of lithic assemblages. The project contributes a novel technology and rigorous method that can be used broadly in lithic, sherd, and patina analyses, among others.

**INSTITUTE FOR FIELD RESEARCH UNDERGRADUATE
STUDENT PAPER AWARD**



THATCHER ANDREW ROGERS

For his excellent paper on the Diablo phase of occupation at Paquime, we present the IFR Undergraduate Student Paper Award to Thatcher Andrew Rogers. His paper examines whether the Diablo phase of occupation at Paquime is supported using attributes of architecture reported by Di Peso. Rogers concludes that evidence for the Diablo phase, and for a decrease in centralization and standardization in architectural construction during later

80TH ANNUAL MEETING

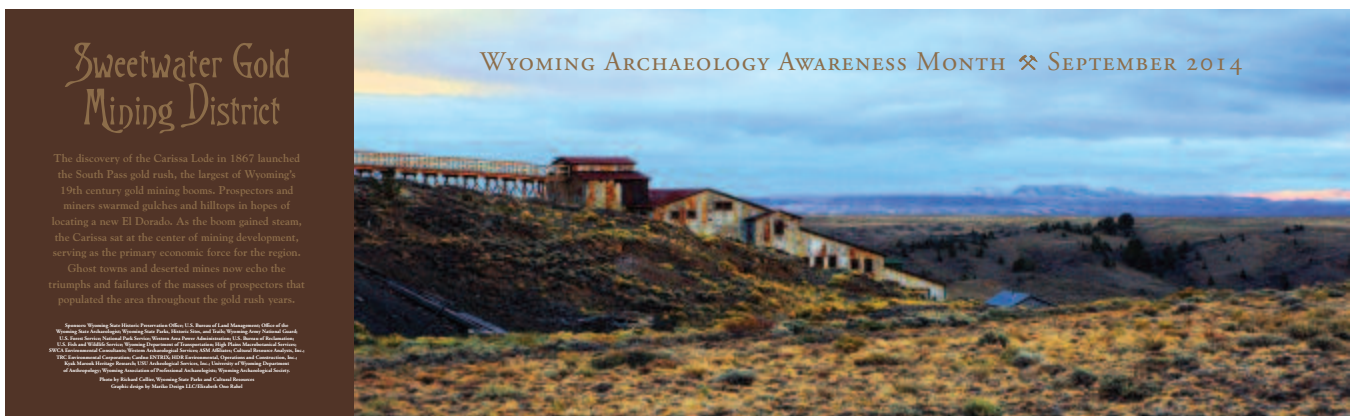
occupations at Paquimé, is present. The study provides valuable information on the period of time during which Paquimé was abandoned and on issues of cultural continuity in a post-Paquimé Casas Grandes landscape.

ARCHAEOLOGY MONTH POSTER AWARD

FIRST PRIZE: ALASKA

SECOND PRIZE: OREGON

THIRD PRIZE: WYOMING



CEREMONIAL RESOLUTIONS

The Ceremonial Resolutions Committee offers the following resolutions:

Be it resolved that appreciation and congratulations on a job well done be tendered to the

Retiring OFFICERS

President Jeffrey Altschul

Secretary Christina Rieth

and the retiring BOARD MEMBERS

Suzanne Fish and Sarah Herr

To the Staff, and especially to Tobi A. Brimsek, the Executive Director, who planned the meeting, and to all the volunteers who worked at Registration and other tasks;

To the **Program Committee**, chaired by

Jane Eva Baxter

Assisted by

Shaza Wester Davis

and to the **Committee Members of the Program Committee**

Mitch Allen	John W. Norder
Traci Ardren	Tricia E. Owlett
Caryn M. Berg	William A. Parkinson
Mary Jane Berman	Megan A. Perry
Bradley Chase	Paula Porubcan
Zoë Crossland	Gordon F. M. Rakita
Sarah Croucher	Charles R. Riggs
Kristin De Lucia	Yorke Rowan
Colleen Delaney	Rachel E. Scott
Meredith Ellis	David B. Small
Ronald K. Faulseit, Jr.	Travis W. Stanton
Jacob Fisher	Sarah L. Surface-Evans
Lisa M. Fontes	John J. Taylor-Montoya
Perry L. Gnivecki	Clare Tolmie
Mark Hylkema	Megan Victor
Morag M. Kersel	Melissa A. Vogel
Amanda L. Logan	Elizabeth L. Watts
Jeanne Lopiparo	Alice Yao
Christopher Milan	David R. Yesner

To the **Annual Meeting Local Advisory Committee**, chaired by

Colin I. Busby

And to other **committee chairs and members completing their service** and to the many members who have served the Society on its committees and in other ways;

And sincere wishes that those members of the Society who are now serving in the armed forces return safely.

Will the membership please signal approval of these motions by a general round of applause.

And be it further resolved that thanks again be given to those who inform us of the deaths of colleagues, and finally,

A resolution of sympathy to the families and friends of

Harold Adelson	Robert McGimsey
Larry Agenbroad	Patricia Parker
George Armelagos	Clay Patton
James Ayers	David Peacock
Bill Baxter	Diane Pritchard
Sarah Bridges	Dan Roberts
John Clegg	Kelly James Schroeder
William Cremin	Clyde Snow
Hester Davis	George Stuart
Peter Furst	Joseph M. Verbka
Keisan Griffith-Roberts	Don Weaver
Ndeye Sokhna Gueye	Willem Willems
Mark Lynott	

Will the members please rise for a moment of silence in honor of our departed colleagues.

Respectfully submitted,

Dean Snow

on behalf of the Ceremonial Resolutions Committee

LARRY DELMAR AGENBROAD

1933–2014

Larry Delmar Agenbroad died in Hot Springs, South Dakota, on October 31, 2014, following a brave, hard-fought battle with kidney disease. His life ended fittingly in the shadow of his beloved Mammoth Site of Hot Springs, a site he first opened in 1974. As its director, he developed it over 40 years into the premier paleontological center that it now is.

Larry was born on his family's farm near Nampa, Idaho, on April 3, 1933, and he spent his childhood there. He served with the U.S. Navy as a Seabee in North Africa, married his childhood sweetheart, Wanda, and did petroleum exploration in New Mexico for a time. But his eventual goal of becoming an academic and scientist was realized through graduate work at the University of Arizona, where he earned both a Ph.D. in Geology in 1967 and a Master's in Anthropology in 1970. He went on to serve on the faculty at Chadron State College (Nebraska) from 1967 to 1978 and then finished his teaching career at Northern Arizona University from 1978–2003. Following his retirement from NAU in 2003, his last 10 years saw some of his most productive research.

During his years as an academic and researcher, he engaged in many field projects, including many with colleague Jim Mead. These projects were both geological and archaeological in nature and include the Hudson-Meng Bison Kill of Paleoindian age in Nebraska, Bechan Cave work on an extensive deposit of mammoth dung in Utah, a Siberian mammoth recovery, geological and archaeological work at both the Murray Springs and the Lehner Mammoth kill sites in Arizona, and many seasons excavating pygmy mammoths on Santa Rosa Island. But the true *pièce de résistance* of Agenbroad's scientific career has been his work as the founder and director of the Mammoth Site of Hot Springs in Hot Springs, South Dakota. This unparalleled sinkhole find of more than 60 individual mammoths (mostly Colom-



bian), along with other Pleistocene fauna, has become a center for international study, as well as one of the most visited tourist locales within the Black Hills. An immense amount of research has taken place at the site over the past 40 years, and many volumes of scholarly papers have been produced. He was instrumental in making the Mammoth Site an

active educational center, providing an organized curriculum and study opportunities for public schools, a chance for young people to participate at the site through their Junior Paleontology sessions, and access to the site for international academics through the Visiting Scholars program. He has appeared in many television and IMAX films dealing with mammoths and presented papers on the subjects internationally. The name Larry Agenbroad has become synonymous with all things mammoths.

Larry was a member of the Explorers Club, receiving the Explorers Club Lowell Thomas Award for Lifetime Achievement in 2005, and he was given the Rip Rapp Archaeological Geology Award from the Geological Society of America in 1996.

Larry has mentored a great many students, encouraging them and following their academic careers through their Ph.D. studies. His legacy lives on through their careers in the fields of geology, paleontology, and archaeology.

Larry's keen sense of humor and his unbounded enthusiasm for life and for friends and family will long be remembered. Within three months of his passing, he was joined in death by his beloved wife, Wanda. Larry and Wanda are survived by their two sons, Finn and Brett, their daughters-in-law, Heidi and Maria, and two grandchildren, Andy and Katy.

E. Steve Cassells, Laramie County Community College, Cheyenne, Wyoming

NEWS & NOTES

The Pre-Columbian Society of Washington, D.C. will host its 22nd annual symposium, "Amazonia and the Making of the Andean World," on Saturday, September 26, 2015, at the U.S. Navy Memorial and Naval Heritage Center, Washington, D.C. Presenters will review the enormous changes that have taken place in our understanding of pre-contact tropical societies. Speakers will focus on discoveries about the development of sophisticated lifeways and will examine recent evidence for early interaction with the Formative-period Andean world. See www.pcswdc.org for details and information about registration.

The Grup d' Arqueologia Pública i Patrimoni (GAPP; Public Archaeology and Heritage Group) led by Margarita Diaz-Andreu (ICREA-UB) organized a seminar and a workshop held February 18–20, 2015. Both events were held in the Universitat de Barcelona (Spain) and were linked to the European project [Heritage@Values Network](mailto:Heritage@ValuesNetwork).

On the first day, a seminar co-organized by Apen Ruiz Martinez (UOC-UB) and Ana Pastor (Ph.D., UB) received an outstanding turnout of students and professionals who attended a full day of presentations. The seminar was divided into three sessions to discuss themes such as social inclusion and heritage, participatory archaeological tourism, virtual heritage, and public archaeology. The presenters offered an insightful and diverse perspective on heritage values and the interactions between archaeology and the public, indicating a growing interest in these themes in Spain.

The following two days (19–20 February) were dedicated to the "Heritage Values and the Public" workshop organized by a European-funded project led by the University College of London, with partners from the University of Leiden, the Technical University of Eindhoven, the Norwegian Conservation Center (NIKU), and the University of Barcelona. This workshop was the last of three meetings organized during the project. On this occasion, around 40 specialists from more than 15 countries and from different disciplines associated with heritage conservation, management, museums, universities, or the private sector participated in two fruitful days of discussion. The workshop was divided into five sessions: Making Heritage Inclusive; Participatory and Sustainable Heritage; Virtual Heritage and the Public; Tourism; and, finally, World Heritage. The meeting shed light on how specialists are currently thinking about issues such as the use of heritage as a tool for social inclusion, heritage and collective memory in today's changing Europe, urban transformations and heritage values, and the impact of World Heritage nominations on local communities. Some of the papers addressed methodological aspects that are emerging in the research on heritage and the public, for example, the use of oral histories, virtual exhibitions, ethnography, and participatory mappings. For more information on both events, on GAPP's activities, or on the Heritage Values Project, follow [@gapp_bcn](https://twitter.com/gapp_bcn) and [@heritage_values](https://twitter.com/heritage_values) on Twitter and visit www.heritagevalues.net.

CALENDAR

MAY 5

Online Seminar: AMS Radiocarbon Dating: Expectations & Essentials for Sample Selection and Calibration

SEPTEMBER 28

Online Seminar: Introduction to Digital Repositories for Archaeological Materials: tDAR (the Digital Archaeological Record)

NOVEMBER 5–7

SAA/EAA Joint Meeting: Connecting Continents: Archaeological Perspectives on Slavery, Trade, and Colonialism

NOVEMBER 17

Online Seminar: Archaeological Curation for the 21st Century

New books from TEXAS A&M UNIVERSITY PRESS

Dutch East India Company Shipbuilding

The Archaeological Study of Batavia and Other Seventeenth-Century VOC Ships

Wendy van Duivenvoorde

Foreword by Jeremy Green

Wendy van Duivenvoorde presents a five-year study aimed at reconstructing the hull of Batavia, the only excavated remains of an early seventeenth-century Indiaman to have been raised and conserved in a way that permits detailed examination. The author uses data retrieved from the archaeological remains, interpreted in the light of company archives, ship journals, and Dutch texts on shipbuilding of this period.

8½x11. 356 pp. 125 b&w photos. Map. 85 line art. Bib. Index. \$90.00 hardcover



Maritime Studies in the Wake of the Byzantine Shipwreck at Yassiada, Turkey

Edited by Deborah N. Carlson, Justin Leidwanger, and Sarah M. Kampbell

Foreword by George F. Bass

Seventeen papers from that symposium featured in this book broadly illustrate such varied topics as ships and seafaring life, maritime trade, naval texts, commercial cargoes, and recent developments in the analysis of the Yassiada ship itself.

8½x11. 256 pp. 32 b&w photos. 12 maps. 26 line art. 22 graphs. Bib. Index. \$75.00 hardcover



The Origins of the Lost Fleet of the Mongol Empire

Randall J. Sasaki

Sasaki provides a starting point for understanding the technology of the failed Mongol invasion of Japan in 1281 CE, as well as the history of shipbuilding in East Asia.

216 pp. 68 b&w photos. 2 maps. Bib. Index. \$50.00 cloth

Pioneering Archaeology in the Texas Coastal Bend

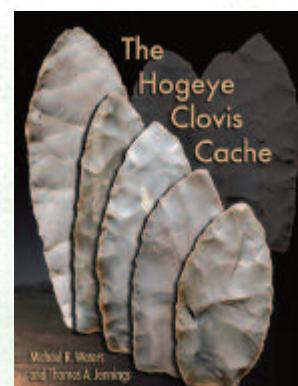
The Pape-Tunnell Collection

John W. Tunnell Jr. and Jace W. Tunnell

Foreword by Thomas R. Hester

Working in the days before much of the development that now covers the region, Harold F. Pape and his stepson John Tunnell studied more than two hundred sites throughout the Coastal Bend. Tunnell and son Jace present the collection as a survey of the state of knowledge in the late 1920s and 1930s.

256 pp. 146 color photos. 8 maps. Chart. Bib. Index. \$50.00 hardcover



The Hogeye Clovis Cache

Michael R. Waters and Thomas A. Jennings

Waters and Jennings provide a well-illustrated, thoroughly analyzed description and discussion of the Hogeye Clovis cache, the projectile points and other artifacts from later occupations, and the geological context of the site.

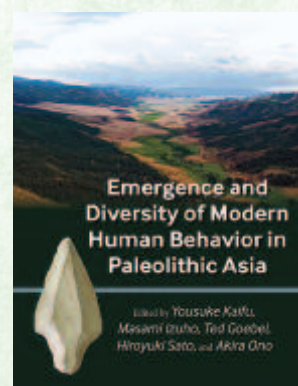
8½x11. 156 pp. 59 color photos. 33 line art. 2 maps. 6 charts. References. Bib. Index. \$30.00 hardcover

Emergence and Diversity of Modern Human Behavior in Paleolithic Asia

Edited by Yousuke Kaifu, Masami Isuho, Ted Goebel, Hiroyuki Sato, and Akira Ono

This book gathers the world of archaeologists from the Pacific Rim of Asia, Australia, and North America, to address the relative lack of attention given to the emergence of modern human behavior as manifested in Asia during the worldwide dispersal from Africa.

8½x11. 600 pp. 230 b&w photos. Index. \$65.00 hardcover



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**Archaeological Perspectives on
Slavery, Trade, and Colonialism**

Registration opens in May 2015

**Check online for the Preliminary Program at
www.saa.org/Portals/o/SAA_EAA_PP.pdf**

For the first time ever, SAA and EAA have organized a joint meeting that will bring together scholars on a tightly focused high-caliber thematic meeting. For our inaugural meeting, we have chosen a theme of great interest to archaeologists on both sides of the Atlantic: slavery, trade, and colonialism.



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The 2016 Call for Submissions
is now available on SAAweb:
www.saa.org/call

Visit this page to find a letter from SAA's President, information on submission policies and guidelines, and directions on how you can access the user-friendly, web-based submission system. View, download, and/or print the Call for Submissions today. We hope you consider participating in SAA's 81st Annual Meeting!

Questions?

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