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*Newsletter*

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**THE QUEST FOR FOOD AND EMERGENCE OF THE ANCESTORS IN THE  
MIDDLE RIO GRANDE VALLEY**

**Matthew Schmader**

**7:30 pm Tuesday, July 21, 2020**

*Via Zoom*

*At Your Computer or Smart Phone*

The transition from hunting and gathering to agriculture is often regarded as one of the most profound cultural changes to take place in any region. This fundamental shift occurred at different times and differing rates across the American Southwest. In the central Rio Grande valley, the transition seems to have been quite gradual and to have happened relatively late. This talk explores a 4,000-year long period in the middle Rio Grande valley from 3000 BCE to 900 CE by examining the continual quest for food along with related basics of life such as water, shelter, and technology. Relationships between domestic architecture, food-related technologies, diet, site structure, and settlement patterns are explored while questioning whether the local adoption of horticulture was necessarily a rapid or complete process.

Matt Schmader has been conducting archaeological research for 40 years in the southwestern United States and obtained his PhD in 1994 from the University of New Mexico. He has been principal investigator on dozens of projects, working at a wide variety of sites in central New Mexico from Paleoindian campsites, Archaic period dwellings, early Puebloan pithouse villages, pre-European classic period pueblos, sacred petroglyph areas, to the historic red-light district in downtown Albuquerque. Since 2007 his research has focused on the 1540-1542 Coronado exploration in the Rio Grande valley, its conflicts, and impacts on local native populations. He is adjunct professor of archaeology at the University of New Mexico Department of Anthropology and retired Superintendent of the City of Albuquerque Open Space Division and former City Archaeologist.

*[Ed. Note: For various reasons, chiefly a computer crash at a critical moment, this Newsletter is much delayed, and the virtual presentation has already taken place. Dr. Schmader has provided a synopsis, which begins on page 2.]*

**Reminder: There is no meeting and therefore no Newsletter in August.**

## **SECRETARY'S REPORT ON THE AAS JUNE 16 VIRTUAL MEETING**

President Evan Kay called the Zoom meeting to order at 7:35 pm and briefly relayed the following reports.

From Vice President Gretchen Obenauf: The speaker for July is still to be arranged.

From Treasurer Tom Obenauf: There were no renewals or new members in the June 1 mail pickup. We did receive a Museum auditorium fee refund (\$115) and the Postal Service annual bill for the mailbox rental (\$168 this year, up from \$148 last year).

We have now received four auditorium refunds corresponding to cancelled meetings.

Respectfully submitted by Susan King, Secretary

## **SECRETARY'S REPORT ON THE AAS JULY 21 VIRTUAL MEETING**

President Evan Kay began the virtual Zoom meeting at 7:33. He relayed the following reports.

From Treasurer Tom Obenauf: Income for the month was \$54.03, and annual rental for the post office box was \$216.12, for a net expense of \$101.12. There is a balance of \$11,413.96 in the checking account. AAS will be getting a refund of \$115 for the prepayment of the July rental fee to Albuquerque Museum.

Membership Chair Mary Raje: We gained one new member in June for a total of 159 individual members and four institutions.

We now have guidelines for student membership that will come before the Board for approval.

Evan also announced that an exhibit of the artwork of member (and Rock Art Recording Team Chair) Carol Chamberland is on view at the gallery of the Albuquerque Open Space Visitor Center. The artwork was inspired by Petroglyph National Monument. As the gallery is operating under COVID protective measures, they are letting five people in at a time into the exhibit space to maintain social distance. [More details in article on page 4.]

Carol added that the new Director of Open Space expects to post a video of the exhibit on their website in about two weeks.

Newsletter Editor Helen Crotty: Because of a computer crash, the Newsletter's publication is delayed; it will be published as soon as possible. As there is no August meeting, the next Newsletter will be for September.

Vice President Gretchen Obenauf introduced our speaker, Matt Schmader, who provided the following synopsis of his presentation.

Respectfully submitted by Susan King, Secretary

## **THE QUEST FOR FOOD AND EMERGENCE OF THE ANCESTORS IN THE MIDDLE RIO GRANDE VALLEY**

By Matthew Schmader, University of New Mexico Department of Anthropology

The transition from the Archaic to the Early Ancestral Pueblo period is one of the most significant changes in the cultural evolution of central New Mexico. The Archaic period, which lasted about 6,000 years, was one of apparent great stability in terms of the way people lived. It ended as periods of major climatic shift brought true desert conditions and environmental change to the American Southwest. The Archaic is divided into several phases:

7,500-6,800 BP	(5500-4800 BCE)	Jay Phase
6,800-5,200 BP	(4800-3200 BCE)	Bajada Phase
5,200-3,800 BP	(3200-1800 BCE)	San Jose Phase
3,800-2,800 BP	(1800-800 BCE)	Armijo Phase
2,800-1,900 BP	(800BCE-100 CE)	En Medio Phase

The very end of the Archaic has differing names for the phases and differing date ranges depending on location, but in the middle Rio Grande valley it certainly ceased by 500 CE. The following period, now usually called the Early Ancestral Pueblo (EAP) existed by the 500s CE and represented a time of swift cultural and adaptive change. This presentation goes into detail about the mechanics and effects of both long-term stability during the Archaic and short-term adaptive shifts during the onset of the EAP.

The lecture summarizes 20 years of field work done in the northern part of Rio Rancho, bringing together information from six projects covering 4,500 acres (seven square miles) and over 250 archaeological sites. The work was done ahead of land development by Amrep Southwest, Inc., for areas with now-familiar place names in Rio Rancho: River's Edge, Enchanted Hills, Lomas Encantadas, Hawk Missile Site, North Hills, and Northern Meadows. The project areas cut through a series of topographic and environmental zones from gravel hills to sandy ridges, from juniper woodlands to open grasslands, and from major arroyo systems to the first terrace of the Rio Grande floodplain on the west side of the river. This variety of settings contributed to the wide sample of sites both in terms of location and cultural time period.

Some of the earliest dwellings found in central New Mexico (from the Enchanted Hills area) were simple brush-covered structures dating back to 3000 BCE, during the San Jose phase. Following the San Jose phase, sites were occupied more intensively, and the first midden deposits – accumulations of domestic refuse – are found in sites from the Armijo phase. Houses built during the Armijo phase began to show somewhat greater investment in architecture, with floor preparations and more features. But it was not until the ensuing En Medio phase that some structures were more carefully built and had storage pits. More Archaic dwellings in the area dated to the En Medio phase than to any other time period. Specialized sites such as milling stations with huge boulder metates were also found.

By the end of the En Medio phase, a very extended time of low precipitation lasted most of a 270-year-long period from 250 CE until 520 CE. This prolonged dry period is called the Great Drought by some researchers. It was exactly during the Great Drought that the ingredients for major cultural change were all in place, the most important of which was the development of corn as a food source. Earlier corn races were not very abundant nor productive, but the need to find supplemental food in drought conditions resulted in crucial changes to the plant. The dramatic changeover to Early Ancestral Pueblo cultural lifeways emerged as soon as the Great Drought ended. Houses were larger and had formalized features including central hearths, roof supports, ventilation systems, and internal storage pits. Sites with clusters of pithouses appeared along the west bank of the Rio Grande, a shift from the Archaic usage of the grasslands of the upper West Mesa some several miles to the west.

Food-related technology changed with the adoption of a diet that included corn: ceramics were needed to extend the cooking time of corn, and the shape of manos and metates both reflect the need to grind corn before it is cooked. Storage pits increased in size due to the need to keep food supplies over the winter time. Large storage pits found outside of houses imply that any food surpluses were available to the community at large, while storage pits found within houses suggest that, at times, the food supplies were not so abundant or communally shared – that is, there may have been periods of food scarcity.

Even though corn yields could be very high during good years, data on plant remains indicates that much food was still based on wild species. Certain plants – such as goosefoot, cholla, sand dropseed and other grasses, beeweed, bugseed, and sunflower – were used during the later Archaic phases and continued to be used by Ancestral Pueblo people, a time period of 2,500 years or more. Other species were found during both cultural periods but for a shorter length of time: globemallow, hedgehog cactus, purslane, pigweed, and groundcherry. The result is that about half of the Ancestral Pueblo diet was derived from corn and other cultigens while half remained based on wild species. This means that diets were not necessarily assured or very good at all times. The same effect can be seen in animal species, as increasingly smaller and wider varieties of animals were used for meat protein. Jackrabbits and cottontails were eaten most frequently, but many other small species such as woodrats, pocket gophers, field mice, birds, turtles, and reptiles were also eaten. This suggests a chronic condition of food scarcity, which is confirmed by skeletal evidence showing overall poor health and common dietary stress.

Other clues about daily life during the EAP are found in the houses themselves. Less frequent residential moves meant that areas within dwellings had to be maintained for routine activities. As people stayed put for longer periods, some structures were allocated primarily for cooking while others were for sleeping. This is seen in small

houses with large hearths and abundant features (cooking structures), compared to larger houses with smaller hearths and fewer internal features (sleeping structures). Frequency of residential moves was likely tied to the relative success of the crop. In times of food scarcity Ancestral people were compelled to move away from the river's edge and into the former Archaic gathering areas to find food, in much the same way as their predecessors did centuries before.

## **CAROL CHAMBERLAND'S ART EXHIBITION AT THE OPEN SPACE VISITOR CENTER**

Carol is the immediate past president of AAS, originator and chair of the sONAR program, and originator and co-chair of the rock art recording group. An exhibition of her paintings and digital works, "Fire & Spirit: The Enduring Legacy of Petroglyph Monument," is on view at the Open Space Visitor Center, 6500 Coors (east side, between Montaña and Paseo del Norte), 8:30 am to 5 pm Tuesday through Saturday until August 31. Face masks and social distancing are required, but it's rarely crowded. The Visitor Center is in a lovely setting beside the bosque and with an archeological site nearby. Carol advises planning on some extra time to linger outdoors and enjoy the surroundings. Members may remember that the AAS 50<sup>th</sup> Anniversary celebration was held here.

## **FRIENDS OF CORONADO STATE HISTORIC SITE ONLINE GIFT SHOP**

Pat Harris, AAS Field Trip Chair is a very active member of Friends of Coronado Historic Site, a sister affiliate of the Archaeological Society of New Mexico. She suggests that AAS members who don't want to shop in person these days for a Southwestern gift might consider what's available at FCHS's Sun Father's Gift Shop online at [www.kuaua.org](http://www.kuaua.org). Click on [Store](#) to check out the offerings, which include books and "designer" face masks for children and adults.

## **BOOK REVIEW**

*Tewa Worlds: An Archaeological History of Being and Becoming in the Pueblo Southwest*, by Samuel Duwe. Tucson: University of Arizona Press. 2020. xix+242 pp., 5 tables, 35 figures, bibliography, index. \$60.00 hardcover (ISBN 9780816540808), \$60.00 eBook (ISBN 9780816541416).

Reviewed by Thatcher A. Rogers

The archaeological record of northern New Mexico has traditionally been overshadowed by long-standing debates regarding when people moved from the Four Corners area into north-central New Mexico and the resulting cultural impacts of the migration. The overwhelming majority of contemporary research within the area has focused on the Tewa Basin, which is located to the northwest of Santa Fe and endowed with incredibly large ancestral communities and their descendants living in the six contemporary Tewa Pueblos. Several of these sites were documented by early New Mexico archaeologists and later excavated by Florence Hawley Ellis, the two most famous being Tsama'owinge and Sapa'owinge (commonly known as Tsama and Sapawe). Samuel Duwe is an Assistant Professor in the Department of Anthropology of the University of Oklahoma. His research focuses on the development of the ethnographic Tewa identity during the Coalition and Classic periods (A.D. 1200-1598) in the Rio Chama Valley. In this publication, Duwe expands upon his hefty 857-page dissertation to explore the fascinating question of when and how the ethnographic Tewa culture came into being. In the process, Duwe demonstrates that the genesis of ethnographic Tewa culture cannot be pinpointed to a specific time, but rather seen as a continuous path with no terminal point.

Duwe begins with a commentary on a sculptural piece located outside the National Museum of the American Indian in Washington, D.C. entitled *Always Becoming*. Through his careful emphasis on the artistic and cultural attributes of that work, Duwe weaves together the themes of transformation and continuity that permeate the book. The remainder of the first chapter is spent summarizing historical trends and advances in Indigenous-focused research in Southwestern archaeology. The second chapter is rooted in Tewa ethnography and oral traditions as recorded by early twentieth century Anglo anthropologists in Bureau of American Ethnology publications and elsewhere, as well as by historic Tewa anthropologists Edward Dozier and Alfonso Ortiz and Santa Clara Pueblo

artist and historian Rina Swentzell. Through his discussion of the Tewa social order and the Tewa cosmology, Duwe grounds his interpretation of the prehispanic Tewa archaeological record as a narrative of flexibility.

The third and fourth chapters synopsise the archaeological record for the Tewa Basin with an emphasis on the Rio Chama valley. In the third chapter, Duwe presents the chronology and research background for the region, introduces the ongoing debates in Northern Rio Grande archaeological research, and outlines the objectives, theoretical models, and methods of his own research. This chapter is phenomenal in its description of shrine complex types in the Tewa Basin, a research focus that is underdeveloped in less ethnographically-documented areas with fewer descendant communities. The fourth chapter explores the origins of Tewa identity in the archaeological record, focusing on the settlement of the Rio Chama valley during the thirteenth century. Duwe demonstrates, through exploration of the constructed landscape and village layout, that the thirteenth century inhabitants of the Rio Chama valley are characterized by architectural and material culture heterogeneity. This led him to suggest there were likely several different social and cultural groups living in the area prior to the Classic Period.

The fifth chapter expands on the topics of the previous two chapters through the early sixteenth century and provides beneficial insight into the founding of some of the largest prehispanic communities in the Southwest. An important contribution to the discipline is Duwe's emphasis on viewing population movement and sedentism as not always indicative of either success or failure in terms of adaptation. A similar approach, while not cited by Duwe, was undertaken in a study of the Phoenix Basin Hohokam with movement between the Salt and Gila river valleys. The success of these studies demonstrates the need for archaeologists to view movement and sedentism from a more multifaceted perspective. This chapter also provides the most explicit application of Duwe's methods through population reconstruction, architectural analysis, and geochemical sourcing of pottery. The discussion of moieties and ritual landscapes that composes the second half of this chapter is outstanding in its careful consideration of ethnographic data in interpretations of the archaeological record. Important conclusions are that the material and organizational elements found in ethnographic Tewa communities developed during the Classic Period and that this period cannot be perceived as a relatively static time of population aggregation. Rather, Classic Period sites and communities demonstrate dynamic transformation, while at the same time they contain evidence that suggests simultaneous continuity.

The sixth chapter deals with the arrival of the Spanish and their widespread impacts on Tewa society. A key focus of this chapter is reconceptualizing village depopulation as a form of Indigenous resistance and correcting many of the Spanish accounts regarding Tewa communities. Duwe's exploration of San Gabriel (Yunque'owingeh), his report on the results of excavations there by Florence Hawley Ellis, his discussion of the Pueblo Revolt, and his nuanced perspective with respect to the relationship between the Pueblo of Ohkay Owingeh and sites along the Rio Chama are outstanding. The final chapter summarizes Duwe's argument and discusses the present and future of archaeology. I would recommend Duwe's succinct and moving 15-page conclusion as required reading for New Mexico archaeologists.

While *Tewa Worlds* is one of several recent volumes that discuss the prehispanic and historical Northern Rio Grande, including one co-edited by Duwe, it stands out as exemplary in its investigative scope, rich and thought-provoking interpretations, and focus on establishing a deep history from the archaeological and ethnographic record. To me, this volume represents the most significant archaeological publication on northern New Mexico in the past decade and is one I thoroughly enjoyed reading. By moving beyond the debates over the Mesa Verde migration hypothesis that underlie many recent publications about the prehispanic Northern Rio Grande, Duwe opens several doors to new, transformative research directions. I look forward to seeing where these lead and to applying some of his insights and perspectives to my own research.

## **NEWS AND NOTES FROM HERE AND THERE**

**Administration Announces "Revisions" to Bedrock Environmental Law.** President Trump rolled back much of the National Environmental Policy Act, or NEPA, saying it will expedite job-creating projects. The

president’s plan to streamline the National Environmental Policy Act (NEPA), a bedrock environmental law signed with much fanfare by President Richard M. Nixon in 1970, would make it easier to build highways, pipelines, chemical plants and other projects that pose environmental risks. Archaeology Southwest’s analysis of past implementation of the National Environmental Policy Act (NEPA) in relation to the administration’s proposed new rules finds that the executive branch has failed to honor Congress’s clear invitation. America does not need the “bold new approach” taken in the new rules; we need and deserve a re-commitment to implementing NEPA using the many technical and conceptual advances that science and management have produced since the current regulations were issued four decades ago. <https://bit.ly/2CIPHUd> – Archaeology Southwest. [This and the following paragraphs were adapted from *Southwest Archaeology Today*, a service of Archaeology Southwest.]

Landon Newell, an attorney with the Southern Utah Wilderness Alliance commented that everything from an upcoming oil and gas lease sale to the land management plans for Bears Ears and Grand Staircase Escalante National Monuments has to go through the NEPA process. The analysis then goes through another review that allows members of the public and conservation groups like Newell’s to comment on it. Newell said according to Trump’s interpretation of the law, the BLM will no longer need to analyze the effect leasing public land for drilling will have on greenhouse gas emissions. The agency can also look at each lease sale on its own, rather than in the context of already-leased land around it. <https://bit.ly/2WKUC8g> – KUER (PBS).

Statement by Theresa Pierno, President and CEO for National Parks Conservation Association: “The administration’s rewrite of the National Environmental Policy Act is one of their most egregious acts to undermine environmental protections and the public voice. It ... makes very clear how little this administration cares for our national parks, the resources they protect, or their millions of visitors. For more than 50 years, this law has protected our communities and the environment from poorly planned projects that pollute the air we breathe and the water we drink. It has given people a voice in how to best use public lands that belong to all of us. And it has been an important tool for addressing climate change, which is already wreaking havoc on our national parks and communities.” <https://bit.ly/3hsmC8A> – National Parks Conservation Association.

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