

# glyphs

The Monthly Newsletter of the  
Arizona Archaeological and Historical Society

Vol. 75, No. 10

April 2025



## Next General Meeting:

Zoom Only

April 21, 2025

7:00 pm (MST)

**AAHS@Home (Zoom webinar)**

[aahs1916.org](http://aahs1916.org)

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## President's Message

by Rich Lange, President

Hello and welcome to April! Hopefully those “April showers” of conventional wisdom will materialize after a pretty dismal winter and early spring as far as rain and snow have gone.

We hope you were able to take advantage of the latest AAHS book sale, held on the lawn in front of the Arizona State Museum (ASM) on campus March 15–16, 2025. Many newly donated professional libraries were organized and priced by Katherine Cerino and the booksale committee, plus many other volunteers. Thanks to you all! These book sales provide important support to the ASM Library and Archives. Your help and purchases were much appreciated.

More things to do are headed your way, as you will see in reading through the monthly *Glyphs*. Join us online for upcoming lectures and take advantage of as much as you can for upcoming field trips and other activities. You can keep track of all of these and more by also checking your emails from AAHS and keeping track of us online at [aahs1916.org](http://aahs1916.org).

There is a lot going on at many levels that will certainly affect organizations like AAHS and our friends and partners as we try to move forward doing archaeology and history and sharing places, knowledge, and information with interested supporters. Changes may be coming to how we do these things, when we do these things, where we are able to do these things, and who our collaborators will be.

We all need to be innovative and imaginative about continuing existing activities and programs, as well as exploring new possibilities. We all may also need to work to ensure the continuation



of funding and programs that promote the management of, preservation of, and access to places and knowledge, including the protection of new places and the acquisition of new knowledge and understanding.

Memberships to AAHS and organizations like AAHS have recently been static or even declining. Such memberships confirm support for the mission and objectives of these organizations. We know we can always do better and that desire/goal is shared by our “community.” We need to add to that community by sharing our history and goals and by encouraging new members to join us.



## AAHS Lecture Series

*NOTE: Lectures are all now via Zoom only.*

- April 21, 2025: R. E. Burrillo, *Below and Beyond Perry Mesa: The Archaeology of the Greater West Verde Area, Central Arizona*
- May 19, 2025: Angela Huster, *Aztec Conquest of the Toluca Valley*
- June 16, 2025: Marion Forest, *Recent Research on the Decline of Mesoamerican Teotihuacan: Reconfiguring a City from the Margins*
- July 21, 2025: Jakob Sedig, *Ancient DNA Work Done in Western and Northern Mexico*
- Aug. 2025: No lecture: Pecos Conference
- Sept. 15, 2025: Gary Huckleberry, *Decline of Hohokam Culture Based on Soil Degradation*
- Oct. 21, 2025: Andrea Torvinen, *Research at the Site of La Quemada in Zacatecas, Mexico*
- Nov. 17, 2025: George Tinseth, *History of Aviation in Arizona*



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## April 21: Topic of the General Meeting

### *Below and Beyond Perry Mesa: The Archaeology of the Greater West Verde Area, Central Arizona*

R. E. Burrillo

We surveyed 3,200 acres of a largely unstudied area extending north from Cave Creek between Perry Mesa and the Verde River basin on behalf of the Tonto National Forest (TNF). The results have exceeded our wildest expectations, including re-recording and new discoveries of entire pueblo communities that challenge the existing models of settlement, agriculture, and regional exchange within the greater Verde River region.



*Speaker Ralph "R. E." Burrillo is an archaeologist, researcher, author, and conservation advocate. He holds an M.S. in archaeology from the University of Utah and is a Research Associate with Archaeology Southwest. His writing has appeared in Archaeology Southwest Magazine, Colorado Plateau Advocate, The Salt Lake Tribune, and many other regional publications. He is the author of Behind the Bears Ears: Exploring the Cultural and Natural Histories of a Sacred Landscape, which was chosen by ForeWord Book Reviews as their critic's choice in nonfiction for the year 2020.*



**This free lecture is offered via Zoom only. However, you must pre-register.  
Visit <https://bit.ly/3Fobk6g>.**

## UPCOMING AAHS FIELD TRIPS

*Field trips are only available to current AAHS members and are limited to 20 people unless otherwise noted. For more information or to sign up, email [aahs1916@gmail.com](mailto:aahs1916@gmail.com).*

### **Amerind Museum**

**April 12, 2025**

Join us on April 12 for a behind-the-scenes tour of the Amerind Museum.

The Amerind, a museum, art gallery, and research center

dedicated to archaeology, Native cultures, and Western art, is located in a stunning landscape an hour east of Tucson, 1 mile south of Interstate 10.



The group, led by Amerind curators, will rotate through the repository collection between 10:00 am and 12:00 pm, as there is a limit to the repository space. The museum opens at 10:00 am, but several newly developed trails winding through the landscape open at 8:30 am, which is where you might like to start your visit. You will also have time after the tour to visit the rest of the museum, the gift shop, and the art gallery or to walk the trails.

Please bring a picnic lunch, and we will all enjoy the Amerind picnic area.

As always, you must be an AAHS member to attend our field trips, which are limited to 20 people. Visit the link for updated information and to register for the trip: <https://aahs.app.neoncrm.com/np/clients/aahs/event.jsp?event=21&>.

### **Arizona Archaeological and Historical Society Newsflash!**

AAHS has a new web address.

Check out the newly designed site at [AAHS1916.org](http://AAHS1916.org).

### *Terminal Pleistocene–Early Holocene Human Occupation of El Pinacate: Reassessment of Julian Hayden’s Lithic Collections at the Amerind Museum*

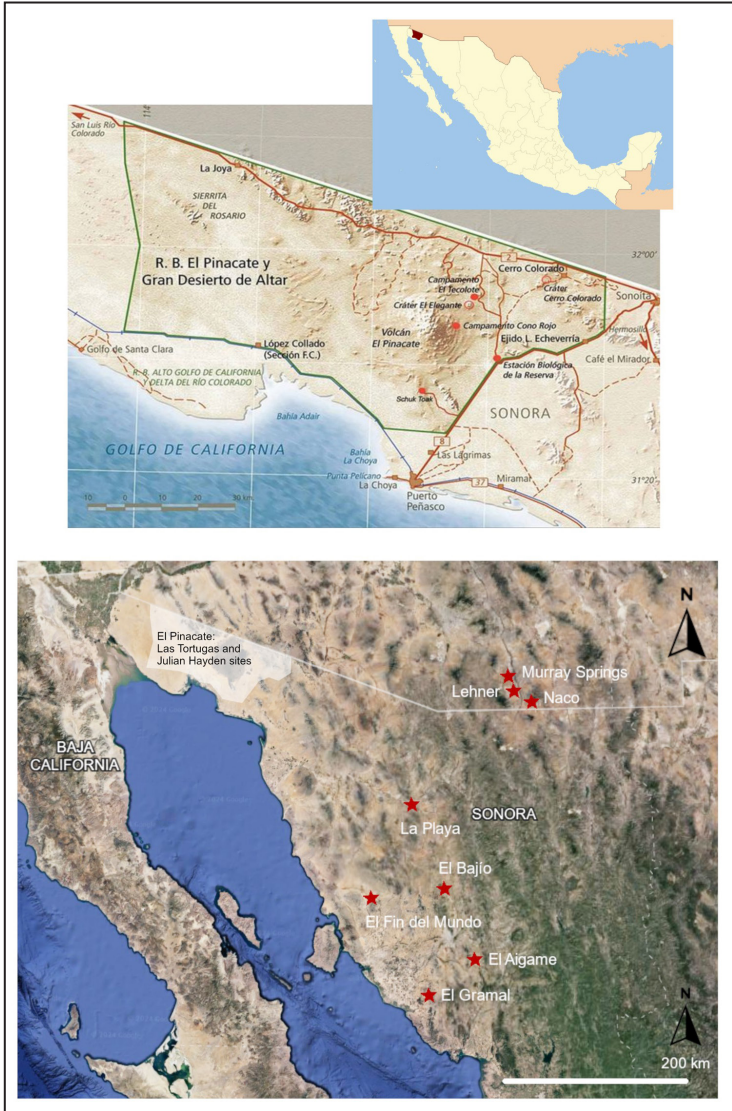
*Ismael Sánchez-Morales  
Arizona Museum of Natural History*

The state of Sonora in Northwest Mexico has produced a wealth of information about the earliest peopling of southwestern North America. This record of Terminal Pleistocene and Early Holocene (~13,000–8,000 cal yr B.P.) human occupations of what is now the Sonoran Desert includes hundreds of isolated stone artifacts diagnostic of the Clovis culture and possibly of late Paleoindian techno-complexes (Gaines et al. 2009), archaeological sites with surface concentrations of Paleoindian lithics (e.g., El Bajío, El Gramal, and El Aigame) (Sanchez 2016), and the only buried Clovis context yet discovered south of the United States is at the site of El Fin del Mundo (Holliday et al. 2024; Sanchez et al. 2014). These sites and isolated finds are concentrated in the Hermosillo Plains in the north-central part of Sonora between the central coast of the Gulf of California and the Sierra Madre Occidental and between the city of Guaymas and the town of Trincheras (Figure 1). This geographic pattern may be the result, at least partially, of the paucity of archaeological research conducted in more remote and less accessible terrain farther from major urban areas and roads.

In 2021, it was reported that surface concentrations of archaeological and paleontological materials containing one Clovis point and skeletal elements of Pleistocene fauna including mammoth (*Mammuthus* sp.), tortoise (*Gopherus* sp.), and camel (*Camelops* sp.) were discovered during surveys conducted in a remote location within El Pinacate and Gran Desierto de Altar Biosphere Reserve, in the northwesternmost area of Sonora (see Figure 1). A bi-national project focused on the early human occupation of El Pinacate formally started that year under the direction of John Carpenter (INAH), Guadalupe Sanchez (INAH), and Benjamin T. Wilder (then with University of Arizona Desert Laboratory). Within the framework of this project, systematic surveys and limited test excavations were conducted in the area, including at the site of Las Tortugas, where the Clovis point and the faunal remains were recovered.

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Ismael Sánchez-Morales was a recipient of a 2024 AAHS Research Grant.



**Figure 1.** Top: General location of El Pinacate and Gran Desierto de Altar Biosphere Reserve where Las Tortugas and the sites identified by Julian Hayden are situated. Bottom: Locations of some of the archaeological sites (indicated by red stars) with Paleindian components in north-central Sonora and the San Pedro River Valley in southeastern Arizona in relation to El Pinacate.

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Work at Las Tortugas has concluded, and publications are forthcoming. These field investigations also resulted in the documentation of archaeological materials of mostly Hohokam affiliation elsewhere in the Biosphere Reserve outside the Las Tortugas core site. No definite Paleoindian artifacts or remains of Pleistocene fauna besides those originally reported in 2021 have been located.

One of the current project's main questions is whether the original finds represent an isolated instance of Clovis artifacts and extinct megafauna within El Pinacate or if there are other localities with evidence of Terminal Pleistocene and Early Holocene human occupations. To answer this question thoroughly, it is necessary to revisit previous work conducted in the area. The research reported here consists of a study of temporally diagnostic lithic artifacts from the archaeological collections recovered by Julian Hayden in El Pinacate during the late 1950s and 1960s (Hayden 1966, 1967, 1976).

Hayden conducted extensive surveys and documented approximately 70 archaeological localities, determining that some of these contained surface concentrations of lithic artifacts associated with the San Dieguito techno-complex, interpreted as dating to the Terminal Pleistocene and Early Holocene (Rogers 1939, 1958; Warren 1967) and potentially containing projectile points of the Lake Mojave and Silver Lake typologies, which have been recently reported from contexts with dates contemporaneous or even older than Clovis (Davis et al. 2014; Davis et al. 2019; Smith et al. 2020). Hayden's report of a San Dieguito component in El Pinacate is significant in that it potentially indicates multiple occurrences of early sites in this region of Sonora.

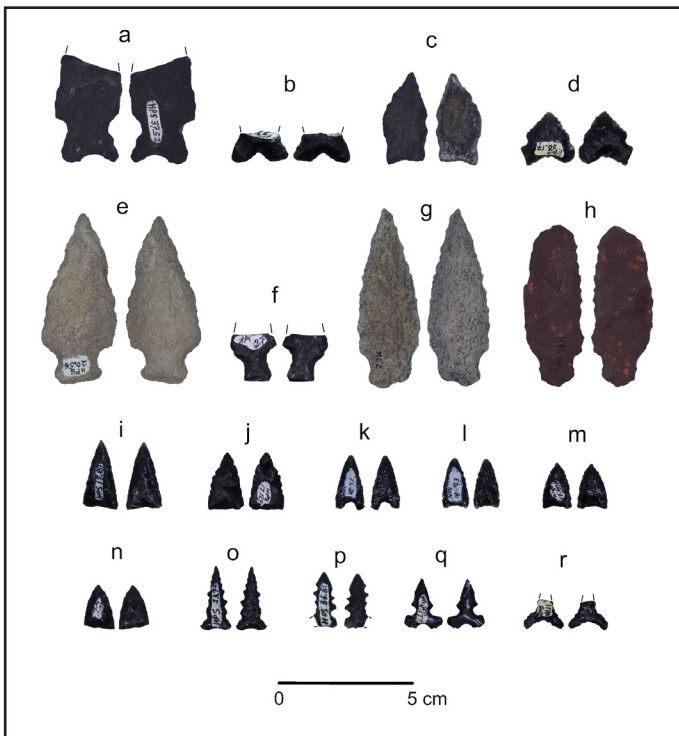
As a first step of the reassessment of Hayden's collections from El Pinacate, this study revisited the projectile points and other potentially diagnostic lithic materials (i.e., those labeled as end scrapers and bifaces) from these collections with the objective of identifying previously unrecognized artifacts diagnostic of early (i.e., Terminal Pleistocene and Early Holocene) human occupations. With the financial support of the Arizona Archaeological and Historical Society (AAHS), this analysis was conducted at the Amerind Museum in Dragoon, Arizona, where Hayden's collections are currently curated.

Typological, metric, and qualitative data (e.g., raw material and condition) were collected from 177 artifacts from 32 sites. Most of the studied lithics were projectile points (Figure 2), but data were also collected from secondary bifaces (likely representing preforms of projectile points and other unfinished implements), drills, and a few end scrapers (Table



1). Typological classification of projectile points was based on specialized publications, including Justice (2002a, 2002b;) and Sliva (1997, 2015). Temporal classification of artifacts other than projectile points, whenever possible, was based on morphology (based on Sliva 1997 and reports of Archaic artifacts from the site of La Playa [Ochoa D’Aynés 2004]). Those that lack any diagnostic features for their typological or temporal classification were considered indeterminate.

More than half of the studied lithics (52 percent) are of Late Prehistoric association (Table 2), dominated by Hohokam projectile point typologies, including Classic Triangular, Livermore, Snaketown Triangular, Hodges



**Figure 2.** Selected examples of projectile points in Hayden’s collection from El Pinacate. Middle Archaic types: (a–b) Pinto; (c) San Jose; (d) Chiricahua. Early Agricultural period types: (e–f) San Pedro; (g–h) Empire. Late Prehistoric: (i–j) Classic triangular; (k–n) Classic concave base triangular; (o–p) Snaketown triangular concave base; (q) Pueblo side-notched. Historic period: (r) Sobaipuri.

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contracting stem, and Late Classic side-notched types. Archaic and Early Agricultural period artifacts are less ubiquitous (28 percent), but several projectile point types are represented including Middle and Late Archaic typologies such as Pinto, San Jose, Gypsum, Chiricahua, Cortaro, and Datil, as well as Early Agricultural period types such as Empire and San Pedro. Some bifacial artifacts were classified as drills of potentially Archaic or Early Agricultural period temporalities, as similar artifacts have been recovered from the Early Agricultural period site of La Playa in northern Sonora, which has produced an important Archaic component as well (Ochoa D' Aynés 2004). Some Historic period artifacts (4.5 percent) were also documented and consisted entirely of Sobaipuri type projectile points. Indeterminate artifacts consist mostly of secondary bifaces, but also include fragmentary artifacts, drills and end scrapers that lack any temporal/typological diagnostic features. Temporal patterns of raw material provisioning are markedly different between the Archaic/Early Agricultural period components and the Late Prehistoric/Historic components. While Late Prehistoric/Historic materials are almost completely dominated by obsidian (96 percent), this raw material only represents 12 percent of Archaic and Early Agricultural period artifacts, which show much more variability of utilized rocks, including basalt, rhyolite, and chert. It is possible that these patterns are the result of selective exploitation of lithic resources. Late Prehistoric projectile points are significantly smaller than Archaic and Early Agricultural period points, thus, obsidian may have been selected due to its workability

**Table 1.** Frequencies of lithic artifact types studied for this project.

Artifact Type	N
Projectile points	138
2ry biface	21
Drill	9
Unidentifiable	6
End scraper	3
<b>Total</b>	<b>177</b>

**Table 2.** Frequencies and proportions of the general temporal associations of studied lithics.

Temporal Association	N	Percent
Archaic	33	18.6
Early Agricultural period	9	5.1
Archaic/Early Agricultural period	8	4.5
Late Prehistoric	92	52.0
Historic	8	4.5
Indeterminate	27	15.3
<b>Total</b>	<b>177</b>	<b>100</b>

into smaller and finer artifacts. It is also possible that the differences in exploited raw materials resulted in part from different patterns of landscape use, including mobility strategies and utilized landscapes.

No artifacts of clear Paleoindian or San Dieguito association were identified during this study. This information, along with the data recovered to date from our field investigations in El Pinacate, suggests that the surface findings from Las Tortugas are, in fact, a rare occurrence. Despite the lack of clear evidence for a Terminal Pleistocene/Early Holocene component in the investigated lithic materials, this study provided important information that will be helpful in planning future field investigations. The Archaic of Northwest Mexico is an understudied period, and its investigation is essential to understanding the development of early agricultural lifeways, which gave rise to the better-known complex societies of the Southwest/Northwest. Through this study, we identified four sites that contained predominantly Archaic and Early Agricultural period projectile points, including Pinacate Peaks, Sitio Celaya, Tinaja del Cuervo, and Tinaja Doble. These sites represent localities with the potential for preserving pre-ceramic surface components and buried contexts and will be investigated during future fieldwork.

### **Acknowledgements**

Special thanks to the Amerind Foundation, particularly Eric Kaldahl and Maria Martinez, for providing access to the lithic collections and for their hospitality during the data collection stage of this study. Thanks to Guadalupe Sanchez for the invitation to join the research project at Las Tortugas and for providing background information on the site and the project. Thanks to Ben Wilder for providing feedback on this study as well. The Arizona Archaeological and Historical Society funded this research.

### **References Cited**

- Davis, Loren G., Alex J. Nyers, and Samuel C. Willis. 2014. Context, Provenance and Technology of a Western Stemmed Tradition Artifact Cache from the Cooper's Ferry Site, Idaho. *American Antiquity* 79:596-615.
- Davis, Loren G., David B. Madsen, Lorena Becerra-Valdivia, Thomas Hgham, David A. Sisson, Sarah M. Skinner, Daniel Stueber, et al. 2019. Late Upper Paleolithic Occupation at Cooper's Ferry, Idaho, USA, ~16,000 Years Ago. *Science* 365:891-897.
- Gaines, Edmund P. Guadalupe Sánchez, and Vance T. Holliday. 2009. Paleoindian Archaeology in Northern and Central Sonora, Mexico (A Review and Update). *Kiva* 74:305-335.

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- Hayden, Julian. 1966. Restoration of the San Dieguito Type Site to Its Proper Place in the San Dieguito Sequence. *American Antiquity* 31:439–440.
- Hayden, Julian. 1967. A Summary of Prehistory and History of the Sierra Pinacate, Sonora. *American Antiquity* 32:335–344.
- Hayden, Julian. 1976. Pre-Altithermal Archaeology in the Sierra Pinacate, Sonora, Mexico. *American Antiquity* 41:274–89.
- Holliday, Vance, Guadalupe Sánchez, and Ismael Sanchez-Morales (editors). 2024. *El Fin del Mundo: A Clovis site in Sonora, Mexico*. University of Arizona Press, Tucson.
- Justice, Noel D. 2002a. *Stone Age Spear and Arrow Points of California and the Great Basin*. Indiana University Press, Bloomington.
- Justice, Noel D. 2002b. *Stone Age Spear and Arrow Points of the Southwestern United States*. Indiana University Press, Bloomington.
- Ochoa D’Aynés, Sarahí. 2004. La Industria Lítica de Bifaciales y Puntas de Proyecto en el Sitio de La Playa, Sonora. Unpublished Bachelor’s thesis. Universidad de Las Américas-Puebla.
- Rogers, Malcolm J. 1939. *Early Lithic Industries of the Lower Basin of the Colorado River and Adjacent Desert Areas*. Papers No. 3. San Diego Museum, San Diego.
- Rogers, Malcolm J. 1958. San Dieguito Implements from the Terraces of the Rincon-Pantano and Rillito Drainage Systems. *Kiva* 24:1–23.
- Sánchez, Guadalupe. 2016. *Los Primeros Mexicanos: Late Pleistocene and Early Holocene People of Sonora*. University of Arizona Press, Tucson.
- Sánchez, G., V. Holliday, E. Gaines, J. Arroyo-Cabrales, N. Martínez-Tagüena, A. Kowler, T. Lange, G. W. L. Hodgins, S. Mentzer, and I. Sánchez-Morales. 2014. El Fine del Mundo: Human (Clovis)-gomphothere (*Cuvieronius* sp.) Association ~13,390 Calibrated yBP in Sonora, Mexico. *Proceedings of the National Academy of Science* 111:10,972–10,977.
- Sliva, R. Jane. 1997. *Introduction to the Analysis of Flaked Stone Artifacts and Lithic Technology*. Center for Desert Archaeology, Tucson.
- Sliva, R. Jane. 2015. *Projectile Points of the Early Agricultural Southwest: Typology, Migration, and Social Dynamics from the Sonoran Desert to the Colorado Plateau*. Archaeology Southwest, Tucson.
- Smith, Geoffrey M., Daron Duke, Dennis L. Jenkins, Ted Goebel, Loren G. Davis, Patrick O’Grady, Dan Stueber, Jordan E. Pratt, and Heather L. Smith. 2020. The Western Stemmed Tradition: Problems and Prospects in Paleoindian Archaeology in the Intermountain West. *PaleoAmerica* 6:23–42.
- Warren, Claude N. 1967. The San Dieguito Complex: A Review and Hypothesis. *American Antiquity* 32:168–186.

# AAHS Membership Application

Membership is open to anyone interested in the prehistory and history of Arizona and the Southwest and who support the aims of the Society. Membership runs for a full year from the date of receipt and covers all individuals living in the same household. Monthly meetings are free and open to the public. Society field trips require membership.

## Membership Categories

- \$60 **Kiva members** receive four issues of the Society's quarterly journal, *Kiva* and 12 issues of our newsletter, *Glyphs*
- \$45 **Glyphs members** receive *Glyphs*
- \$20 **Student Kiva members** receive both *Kiva* and *Glyphs*
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Emily Jonsson, Vice-President for Membership  
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Arizona State Museum, University of Arizona  
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The objectives of the Arizona Archaeological and Historical Society (AAHS) are to: encourage scholarly pursuits into the history and anthropology of the southwest United States and northwest Mexico; encourage the preservation of archaeological sites and historical properties; encourage the scientific and legal gathering of cultural information and materials; publish the results of these investigations; aid in the functions of the Arizona State Museum; and provide educational opportunities through lectures, field trips, and other activities.

AAHS considers the following to be contrary to the Society's objectives and enjoins its members, as a condition of membership, to abstain from the following: the practice of collecting and dealing in archaeological materials for personal gain; the excavation of archaeological sites or historic properties without permit or permission; and the unlawful or unethical acquisition of archaeological or ethnographic materials.

For your records, any portion of your payment over the basic \$60.00 membership may be tax deductible.

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