

glyphs

The Monthly Newsletter of the
Arizona Archaeological and Historical Society

Vol. 70, No. 12

June 2020

**Most AAHS public gatherings are postponed
until further notice. This includes lectures,
field trips, book sales, etc.
Thank you for your patience!**

In the meantime, take this opportunity to see four years' worth of our lectures on the AAHS YouTube Channel: <https://www.youtube.com/channel/UC8lr6wU4P9RMhhBpoZtiQHQ/> videos. In addition to our monthly lecture series, AAHS has been diligently editing interviews with famous Southwestern archaeologists and anthropologists. Interviews on the AAHS YouTube channel include Raymond Thompson, Paul and Suzanne Fish, Jim Ayres, and Bernard Fontana.

**Next General Meeting:
Postponed Until Further Notice**
**Environmental and Natural
Resources 2 Building, Room S107**
1064 E. Lowell Street
Tucson, Arizona
www.az-arch-and-hist.org

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President's Message

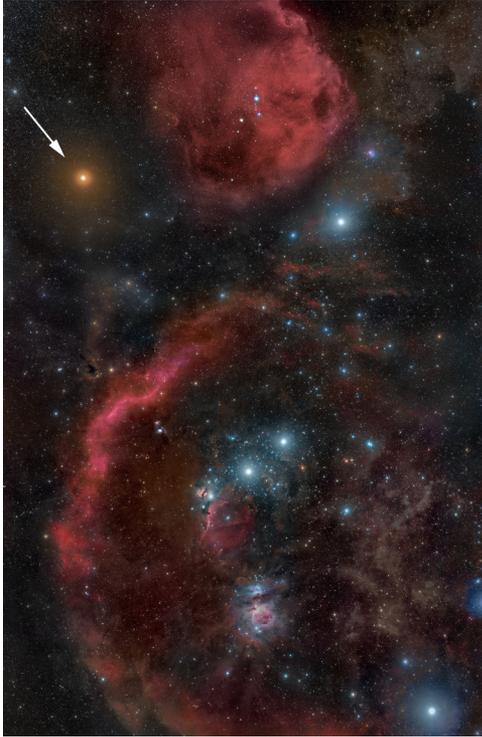
by John D. Hall

Recently, “(t)he red supergiant star Betelgeuse, a bright star in the constellation of Orion, has been making headlines due to a recent drop in brightness. Is an explosion imminent? If it happens, will Earth be affected” (Briggs 2020)? The good news is that the Earth will not be affected if Betelgeuse goes supernova. However, a Betelgeuse supernova would likely produce a spectacular night-time display, possibly even brighter than the full moon. Unfortunately, this may not happen in our lifetimes.

For some context, Betelgeuse is a red supergiant star with “an estimated diameter of 767 million miles (about 1.2 billion km)... and has an estimated mass nearly 12 times that of our sun... and is around 1,400 times larger than our sun” (Briggs 2020). If Betelgeuse were at the center of our solar system, the edges of this red supergiant would reach the orbit of Jupiter! In fact, until this recent dimming trend, Betelgeuse was typically one of the top 10 brightest stars in the night sky. Betelgeuse has now (as of January 2020) fallen to twenty-first place! Betelgeuse is a variable star, and its brightness has been documented to fluctuate over time.

Most astronomers do not believe a Betelgeuse supernova is imminent; however, supernova are a rare phenomenon, and there is no precedent in the history of astronomy that the end of a star's lifecycle is preceded by a dimming of its light. “Predicting supernovae is very much an inexact science, so there is still a possibility, however remote, that Betelgeuse's fiery end could indeed happen tomorrow. Or, to be more exact, it happened 642 years ago and the light from it is about to reach the Earth” (Briggs 2020).

Betelgeuse is the orange star representing the ‘left shoulder’ of the constellation of Orion, and it is the second brightest star in this constellation. Orion is one of the most conspicuous and recognizable constellations, visible in the Northern Hemisphere during the winter. A composite image of the Orion constellation and associated gas and dust clouds (nebulas) is shown in the photograph here.



Photograph taken by Rogelio Bernal Andreo in October 2010 of the Orion constellation showing the surrounding nebulae of the Orion Molecular Cloud complex. Betelgeuse is the (orange) star on the top left (see arrow).

Due to its prominence in our night sky, the Orion constellation has been intimately entangled with human history and mythology. The earliest purported artistic depiction of the Orion constellation has been associated with an ivory carving found in a cave in the Ach Valley of Germany. Radiocarbon dating of deposits associated with the carving suggests it is between 32,500 and 38,000 years old (Whitehouse 2003).

Orion is also recorded in Babylonian star catalogues from 1500 BC (Rogers 1998). In ancient Egypt, Orion is associated with the god *Sah*, who was frequently

mentioned as “Father of Gods” in the Old Kingdom Pyramid Texts (Wilkinson 2003). Of course, the name Orion comes from the ancient Greeks.

I have often wondered if the Archaic and Basketmaker “broad-shouldered” pictographs found throughout southeast Utah may represent the Orion constellation. However, some scholars have linked the broad-shouldered human figures with shamanic attributes, which “strongly suggests that Basketmaker ideology was linked to

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older shamanistic traditions on the Colorado Plateau” (Schaafsma 1994). Overall, the Orion constellation is one of many celestial objects that have fascinated humans and shaped our worldviews for millennia.



Pictographs in Grand Gulch, Utah, showing broad-shouldered human figures. Could the shape of these anthropomorphic figures be influenced by the Orion constellation?

Briggs, Andy

2020 Betelgeuse: What’s Up? *EarthSky Communications, Inc.* January 7. Electronic document, <https://earthsky.org/space/betelgeuse-dimming-late-2019-early-2020-supernova>. Accessed January 2020.

Rogers, John

1998 Origins of the Ancient Constellations: The Mesopotamian Traditions. *Journal of the British Astronomical Association* 108:9–28.

Schaafsma, Polly

1994 Trance and Transformation in the Canyons Shamanism and Early Rock Art on the Colorado Plateau. In *Shamanism and Rock Art in North America*, edited by Solveig A. Turpin, pp. 45–71. Special Publication No. 1. Rock Art Foundation, San Antonio, Texas.

Whitehouse, David

2003 ‘Oldest Star Chart’ Found. *BBC News*. January 21. Electronic document, <http://news.bbc.co.uk/2/hi/science/nature/2679675.stm>. Accessed March 2020.

Wilkinson, Richard H.

2003 *The Complete Gods and Goddesses of Ancient Egypt*. Thames & Hudson, London.

Follow AAHS on Facebook at www.facebook.com/pages/Tucson-AZ/Arizona-Archaeological-and-Historical-Society

AAHS Lecture Series

All meetings are held in Room S107, Environment and Natural Resources Building, University of Arizona, 1064 E. Lowell Street
Third Monday of the month, 7:00 p.m.

- June 15, 2020: Steve James, *Chicken Bones on Pueblo Grande*
[POSTPONED]
- July 20, 2020: TBD
- Aug. 17, 2020: No meeting; Pecos Conference
- Sept. 21, 2020: Karen R. Adams, *Food for Thought: The Deep History of Your Dinner*
- Oct. 19, 2020: Kelsey Hanson, *Technologies of Capturing Color: Paint Practice and Its Analysis in the U.S. Southwest*



NEED SOMETHING TO READ? JPASS PROGRAM



a digital library of
academic journals,
books, and primary
sources

JSTOR is offering AAHS members the opportunity to subscribe to JSTOR at a 50 percent discount through their JPASS program (\$99/year rather than \$199/year). The yearly JPASS includes unlimited reading access to the archival journals in JSTOR and up to 120 downloads.

You must subscribe through our website using your user name and password to have your membership validated: <https://www.az-arch-and-hist.org/publications/jpass-program/>.

glyphs: Information and articles to be included in *glyphs* must be received by the first of each month for inclusion in the next month's issue. Contact me, Emilee Mead, at emilee@desert.com.

AAHS 2020 RESEARCH AND TRAVEL GRANTS

One of the missions of AAHS is to support research and travel. We are pleased to fund six research grants to members of four institutions and one independent researcher. Work includes analysis of metates at Pueblo Bonito, analysis of Cibola White Ware from late period Tewa Basin sites, radiocarbon dates from Pottery Mound, AMS dating from three sites in southeastern Arizona, further study of Chacoan Roads, and reanalysis of Southwestern dogs housed at the Museum of Northern Arizona. We also awarded six travel grants of \$500 each to students for travel to conferences. Those scheduled to attend the cancelled SAAs in Austin will be held for next year.

RESEARCH GRANTS

Jenny Adams (Independent Researcher): \$1,000 to fund travel to the Chaco Culture Natural Historical Park, New Mexico, to examine metates that were recovered from Pueblo Bonito.

Zachary Cooper (University of Colorado, Boulder): \$1,000 for Instrumental Neutron Activation Analysis (INAA) of Northern Rio Grande Cibola White Ware from Late Developmental period (AD 900–1200) period Tewa Basin archaeological sites.

Will Marquardt (University of New Mexico): \$905.30 for three radiocarbon dates from the site of Pottery Mound.

Thatcher Rogers (University of New Mexico): \$1,000 for his project, “Population Mobility and Social Cohesion in the Late Prehispanic American Southwest and Northwest Mexico Region.” Funding will be for AMS dating of materials from three sites in southeastern Arizona.

Robert Weiner (University of Colorado, Boulder): \$1,000 for his project, “Ancient Roads to Chaco: The Dating, Use, and Meaning of Monumental Avenues in the U.S. Southwest.”

Martin Welker (Arizona State Museum): \$500 for a reanalysis of Southwestern dogs housed at the Museum of Northern Arizona.

TRAVEL GRANTS

Krystal Britt (University of Illinois, Chicago): \$500 for travel to the 85th Annual Meeting of the SAA in Austin, Texas. Krystal is presenting a poster titled, *Geochemical Analysis of Mogollon Brown Ware from the Middle Little Colorado River Valley, Northern Arizona*.

Andrew Gillreath-Brown (Washington State University): \$500 for travel to the 85th Annual Meeting of the SAA in Austin, Texas. Andrew is presenting a paper titled, *Riskier Business: Comparative Approaches to Risk and Resilience in Dryland Environments*.

Kelsey Hanson (University of Arizona): \$500 for travel to the 85th Annual Meeting of the SAA in Austin, Texas. Kelsey is presenting a poster titled, *Employing Complementary Non-Invasive Techniques to Characterize Paint Recipe Diversity in the U.S. Southwest*, and co-authoring a poster titled, *Let's Get Crafty: Social and Spatial Organization of Craft Specialization in the Aftermath of Migration*.

Mairead Poulin (University of Arizona): \$500 for travel to the 2020 Conference on Historical and Underwater Archaeology in Boston, Massachusetts. Mairead is presenting a paper titled, *Embodying Survivance: Western Apache Production Practices in the Reservation Era*.

Danielle Soza (University of Arizona): \$500 for travel to the 85th Annual Meeting of the SAA in Austin, Texas. Danielle is presenting a paper titled, *The Archaic U.S. Southwest: Reconsidering the Archaeological Narrative*.

David Witt (State University of New York at Buffalo): \$500 for travel to the 85th Annual Meeting of the SAA in Austin, Texas. David is presenting a poster titled, *Remote Sensing of Chacoan Roads in the Middle San Juan Region*, co-authoring a paper titled, *Incorporating Vegetation Reconstruction in Computational Landscape Archaeoacoustics: An Ancient Maya Case Study*, serving as a discussant in a symposium titled, *Archaeoacoustics: Sound, Hearing, and Experience in Archaeology*, and serving as a discussant in a forum titled, *So, You Have to Move Out of Your Parents' Basement and Get a Job!*

THE 21ST BIENNIAL MOGOLLON CONFERENCE
TUCSON, ARIZONA
OCTOBER 23-24, 2020

Please join us for this exciting biennial conference! The conference welcomes papers related to archaeology of the Mogollon Rim in Arizona, to the Mimbres and Eastern Mimbres Regions of New Mexico, and to interactions within and between those areas and with Ancestral Pueblo, Hohokan, western Plains, and northern Mexico.

Advance registration is \$35 for students, \$50 for others. Paper abstracts are due August 1, 2020.

The conference will be held in the Student Union, University of Arizona, approximately 9:00 am to 4:30 pm depending on the number of presentations. We will endeavor to accommodate most, if not all, submissions. For a printable (or e-mailable) Registration Form, payments, other conference-related information, and links to information about Tucson, please see:

Mogollon2020.com

There will be a reception with refreshments on the evening of October 22 and a conference dinner hosted by Archaeology Southwest on the evening of October 23. There is no additional cost to attend the reception or the dinner.

Major sponsors include Archaeology Southwest, Arizona State Museum (our on-campus sponsor), Desert Archaeology, Inc., Logan-Simpson Design, and Westland Resources. Supporting sponsors include Arizona Archaeological and Historical Society (accounting services), Diehl Research, LLC (Allison Diehl), and Tierra Right of Way Services.

Please direct conference inquiries to Mike Diehl (mdiehl@desert.com) and payment inquiries to Karen Schollmeyer, AAHS Treasurer (karen@archaeologysouthwest.org).

Check the website periodically for updates with additional information about partnering hotels and businesses.

Cornerstone

*Darlene Lizarraga, Director of Marketing
Arizona State Museum*

State of the State Museum

An Update from Director Patrick Lyons

On March 13, our season was cut short, sending us into isolation to prevent the spread of COVID-19. As of the time of this writing, ASM's galleries, store, and library remain temporarily closed, and we have been working from home with minimal time at the museum. Nevertheless, we are still fulfilling our legal responsibilities, curatorial duties, and teaching obligations, and now, reimagining exhibits and public outreach.

Financially, the news is bleak. Our budget has been cut, our revenue streams have been halted, our fundraising initiatives are on pause, and there are several new unknowns.

Before the pandemic, we were absorbing a 3.5 percent mid-year cut in our state funding, as well as a 4.0 percent cut for the fiscal year beginning July 1, 2020. This resulted in the loss of 10 positions this spring. In addition, we were told to expect a 2 percent cut in the fiscal year beginning July 1, 2021. Again, this was before the pandemic hit.

Now, the state and the university are facing significant losses of revenue and increased expenses because of the public health crisis. This will trickle down and compound the financial stress of every unit on campus. We know that you have been hit hard, too. Individual portfolios have taken significant losses in the stock market, paychecks have been halted, jobs have been lost, and lives have been put on hold.

Eventually, this situation will be behind us. We are looking forward to reopening exhibits and resuming public programs, but it will take some time and some reimagining, with fewer personnel, perhaps less exhibit space, and more online engagement. The museum will definitely be different from what we had envisioned,

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planned for, and had been working toward just three months ago. Nevertheless, we are determined not only to steward ASM through this downturn but to thrive.

With optimism and strategic thinking, we will focus on what can be done rather than what can't, capitalizing on the opportunities that inevitably come out of bad situations. We are resolved to adapt, just as we did through the Great Recession, through decades of budget cuts and years of staff depletions. You can be sure that ASMerS know how to bounce back by maximizing sparse resources.

For the time being, we continue to work remotely, but no less enthusiastically.

I will, of course, keep you updated. For now, I send you and yours our best wishes for safety and good health. Be well!

If you'd like to help ASM by making a tax-deductible contribution, you can do so here: <https://give.uafoundation.org/arizona-state-museum>. Thank you!

NEW AAHS LOGO T-SHIRTS AVAILABLE ONLINE!

Need something to lounge around the house in? The new AAHS T-shirts are available in our online store: <https://www.az-arch-and-hist.org/shop/>. Regular cut in gray with black logo or beige with brown logo. Also available in a women's cut in red with white logo. We now have XLs and XXLs in stock in all three colors. The shirts are \$18 each, including postage.



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. If you are joining as a household, please list all members of the 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 *Glyphs*
- \$45 **Glyphs members** receive *Glyphs*
- \$35 **Student Kiva members** receive both *Kiva* and *Glyphs*
- \$100 **Contributing members** receive *Kiva*, *Glyphs*, and all current benefits
- \$150 **Supporting members** receive *Kiva*, *Glyphs*, and all current benefits
- \$300 **Sponsoring members** receive *Kiva*, *Glyphs*, and all current benefits
- \$1,500 **Lifetime members** receive *Kiva*, *Glyphs*, and all current benefits

Note: For memberships outside the U.S., please add \$20. AAHS does not release membership information to other organizations.

I wish to receive *Glyphs* by (circle your choice): Email Mail Both

I am interested in volunteering in AAHS activities: Yes Not at this time

Institutional Subscriptions

University libraries, public libraries, museums, and other institutions that wish to subscribe to *Kiva* must do so through the publisher, Taylor & Francis at tandfonline.com. For institutional subscriptions to *Glyphs* (\$100), contact AAHS VP for Membership at the address below.

You can join online at www.az-arch-and-hist.org, or by mailing the form below to:
Barbara Montgomery, VP Membership
Arizona Archaeological and Historical Society
Arizona State Museum, The University of Arizona
Tucson, AZ 85721-0026

Name: _____ Phone: _____

Address: _____

City: _____ State: _____ Zip: _____

E-mail: _____

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Vice President for Membership: Barbara Montgomery | bmontgomery@tierra-row.com
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Editors of Society Publications

Kiva: Debra Martin, Acquisitions Editor | debra.martin@unlv.edu
Glyphs: Emilee Mead | emilee@desert.com | 520.881.2244

Board of Directors 2019-2020

A A H S



Arizona Archaeological and Historical Society
Arizona State Museum
University of Arizona
Tucson, Arizona 85721-0026
USA

RETURN SERVICE REQUESTED

The objectives of the Arizona Archaeological and Historical Society are to encourage scholarly pursuits in areas of history and anthropology of the southwestern United States and northern Mexico; to encourage the preservation of archaeological and historical sites; to encourage the scientific and legal gathering of cultural information and materials; to publish the results of archaeological, historical, and ethnographic investigations; to aid in the functions and programs of the Arizona State Museum, University of Arizona; and to provide educational opportunities through lectures, field trips, and other activities. See inside back cover for information about the Society's programs and membership and subscription requirements.

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