

Verde Valley Archaeologist

A Quarterly Publication of the Verde Valley Archaeology Center

Conservation - Preservation - Education

Winter 2018

2019 Annual Meeting

The Annual Meeting of the Verde Valley Archaeology Center will be on Tuesday, January 15, at 6:30 pm in the Camp Verde Library. The annual meeting includes reports from the President and Executive Director. This will be followed by the election of members to the Board of Directors.



Following the business meeting our speaker will be Hopi storyteller Donald Dawahongnewa. Donald has dedicated himself to preserving the Hopi culture. He is a resident of Kykotsmovi on Second Mesa from the

Water Clan and member of important religious societies. Dawahongnewa is the Hopi name Donald received during initiation into a religious society.

Dawahongnewa also works in the Hopi Cultural Preservation Office. He makes presentations throughout the Hopi Reservation on topics such as Hopi prophecies, language, weddings, baby naming and medicinal plants. Many are presented in the Hopi language, especially with the elders.

Winter is traditionally the dark time, the time of going within, the time to strengthen the spirit for the cold months ahead. Winter stories give life lessons, hope, humor, entertainment and continue to keep the traditional culture alive. Donald will share some of these Winter stories with us.

Center Receives NPF Grant



In cooperation with the National Park Service, the Center has received a \$5,000 *Open Outdoors for Kids* grant from the National Park Foundation (NPF). This program

is an initiative to connect more kids to their national parks through fun and engaging activities. Children today are more disconnected from their natural and cultural heritage than ever before. *Open OutDoors for Kids* is changing that—building on a child's innate wonder and curiosity about the natural world.

National Parks are gateways to self-discovery and learning and *Open OutDoors for Kids* is making sure all kids from across the country get the chance to experience them. In an era of limited school budgets and increasingly sedentary lifestyles, it is important

Field Institute Partners



The quality of the archaeology tours being offered by the VVAC Archaeology Field Institute (see page 7) is being recognized. The Center recently met with Concierge Services at the Enchantment Resort. Their guests often inquire about the opportunity for guided tours of archaeology sites and National Monuments. Beginning in 2019, the tours offered by the Field Institute will be presented as an option to their guests.



The Verde Valley Archaeology Field Institute participates in the Northern Arizona University Road Scholar program entitled "Best of Sedona: Natural & Cultural Landscapes in Red Rock Country." We provide the opening session on the archaeology of the area. This opportunity

provides VVAC with exposure and credibility. Several of the attendees have visited our museum on their way out of town at the conclusion of the program.



Pink Adventure Tours (formerly Pink Jeep) recently joined the Center as an Executive Business member. With this new level of business

membership the Center will provide an annual archaeology training session for their new guides and an annual refresher to all 90 guides. This cooperation helps to ensure that the information their guides provide will be as accurate as possible. This level of business membership is being offered to other tour operators who visit archaeological sites.

to connect today's youth with all that the National Park System has to offer. Understanding the financial challenge of getting kids into parks, this grant allows the Center to fund the transportation to and from Tuzigoot and Montezuma Castle. Unmatched as learning environments and living laboratories, these National Monuments offer children, families and teachers a unique gateway to experience nature, history and culture, to learn about biodiversity and the environment, and to engage with each other in the great outdoors.

Research demonstrates that kids who spend time outdoors are healthier and do better in school. Kids who have opportunities for hands-on learning outdoors also demonstrate more interest and proficiency in science. Similarly, a young person's understanding of history improves after visiting sites of cultural significance. The Center is proud to participate in this program.



The mission of the Verde Valley Archaeology Center is to preserve archaeological sites and collections, to curate the collections locally, and to make them available for research and education; to develop partnerships with American Indians, cultural groups and the communities it serves; and to foster a deeper understanding of prehistory and American Indian history in the Verde Valley through the science of archaeology.

Executive Director & Editor Kenneth J. Zoll

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Todd Bostwick, PhD, RPA
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President's Message

Dr. James Graceffa

Another year has passed and as I reflect on the accomplishments of the Center, I feel good about what we have done and where we are heading. The success of the Center is a result of the work of our Executive Director Ken Zoll, our Director of Archaeology, Dr. Todd Bostwick and our dedicated volunteers. Our Executive Director definitely keeps the Center moving forward and our Director of Archaeology makes sure we continue to maintain the highest ethics as we carry out our mission of Conservation, Education and Preservation. I am always amazed on what the Center does accomplish and all the good things that seem to happen for the Center.

The Center ended last quarter of 2018 with some great accomplishments after some trying times. Here is a quick look at that last quarter.

The heavy rains this fall took its toll on the Heritage Trail and garden, but thanks to our volunteers all has been repaired. We are once again ready for our winter visitors to enjoy the trail.

The lab continues to analyze and record the artifacts of the Dyck collection as final preparations are being made by Dr. Bostwick to publish his study of the Dyck collection. It will be the ultimate study on the life of the Sinagua in the Verde Valley.

Our fall Gala was a success and this was followed by a wonderful musical presentation by the Hopi of their music past and present. The Center truly adds diversification for its members.

The response to our first member survey was very encouraging. We were pleased with the positive comments and where there were criticism we have taken steps to address those concerns. My door is always open to anyone with a concern or criticism. Our goal is always to improve the Center for its members and the population at large.

Our field trips have commenced again thanks to a few of our members stepping up and leading these trips.

I would like to report that the Board of the Verde Valley Chapter of the Arizona Archaeology Society and the Verde Valley Archaeology Center will be holding two joint lecture presentations a year in the Village of Oak Creek. I feel this will benefit both groups and I look forward to possible future joint projects.

The new exhibit, completed with the cooperation of the Yavapai-Apache Nation and Sharlot Hall Museum, is a must see. It rivals most large major museums. We are already in the works for another great exhibit.

Lastly I want to give a year-end shout-out and thanks to our docents, lab workers, field trip leaders and those who donate time and muscle in the field projects. Our volunteers are the backbone of the Center.

Each New Year brings with it the excitement and anticipation of executing the goals for the Center and 2019 will be no different. Hold on for a wild ride.

I wish all our friends and supporters a Happy and Prosperous New Year. I can promise you that I will be working just as hard in 2019 as I have in 2018 to move the Verde Valley Archaeology Center forward to accomplish our goals

IN THE MUSEUM: ONGOING STUDIES

Our museum collections reflect our amazing world, inspire wonder and form the foundation for scientific discovery. In each issue of the *Verde Valley Archaeologist* we explore some of the objects in our collections.

Dyck Cliff Dwelling Textile Study



Dr. Laurie Webster is working with Dr. Todd Bostwick, Director of Archaeology for the Verde Valley Archaeology Center, on analyzing the remarkable collection of textiles recovered from the Dyck Cliff Dwelling. Dr. Webster is a well-known expert on ancestral Pueblo perishable materials, especially woven objects and textiles. She is also an expert on contemporary Pueblo and Navajo weaving.

Dr. Webster received her PhD in 1997 at the University of Arizona. She is an independent researcher with institutional affiliations at the University of Arizona, Northern Arizona University, the American Museum of Natural History, and Crow Canyon. She has served as a consultant and technical expert on Southwestern textiles and perishable artifacts for museums, federal agencies, tribal groups, and cultural resource management firms. She has analyzed Southwestern textiles as part of grants from the prestigious National Science

Foundation, examining and publishing on textiles and perishable materials from Chaco Canyon, Aztec Ruin National Monument, Salmon Ruin, and other sites.

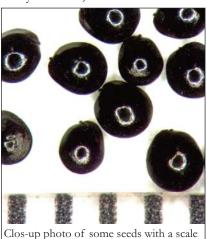
Since 2011, Dr. Webster has spearheaded a team of scholars for the Cedar Mesa Perishables Project. This very important project is documenting thousands of well-preserved perishable artifacts recovered from southeastern Utah during the 1890s and currently located in museums in Chicago, New York, Los Angeles, and Washington, D.C. She was our guest lecturer on October 16, 2018, and spoke about this project. That lecture is available on the Center's YouTube Channel. Dr. Webster has published numerous books and articles, including the edited volume *Beyond Cloth and Cordage: Archaeological Textile Research in the Americas*.



Dyck Cliff Dwelling Amaranth Study

A study of domesticated amaranth (Amaranthus) seeds from inside a cloth bag within a sealed Dyck Cliff Dwelling storage space continues. Coordinated by Dr. Karen Adams, this project includes: the premier North American ancient amaranth scholar (Dr. Gayle Fritz); three molecular biologists (Dr. Terry Murphy, Dr. Markus Stetter, and Dr. Kelly Swarts); one archaeologist (Dr. Todd Bostwick), one computational archaeologist (Dr. R. Kyle Bocinsky); and lab specialist

Abby Dockter, M.A.



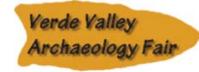
Archaeological botanist Karen Adams has analyzed plant remains from archaeological sites in the U.S. Southwest for the last four decades. She trained as both an archaeologist (Miami University, Ohio) and a botanist (University of Arizona). She has published extensively on ancient plant use by pre-Hispanic groups living in Arizona, New

Mexico, Colorado, and Utah during time periods ranging from over 3,000 years ago to the historic period. Some may remember her from her talk in 2017 entitled "Food for Thought: The Deep History of Your Dinner."

The project aims to assess, via multiple lines of evidence, whether these Dyck Cliff Dwelling seeds represent the domesticated dye (A. cruentus) or grain (A. hypochondriacus) amaranth species, or possibly both. The red dye on some of the spectacular Dyck Cliff Dwelling textiles is also being

tested to determine whether their red color is plant based or mineral based. Such a major study of domesticated amaranths has not occurred in the U.S. Southwest since the original defining publications of Dr. Jonathan Sauer in the 1950s.

ARIZONA ARCHAEOLOGY AND



Every March is Arizona Archaeology and Heritage Awareness Month. In the past, the Center would designate one weekend to hold a Fair packed with lectures, films and art. This year we are doing some of the same activities but spread out throughout the month. See below for the current schedule of activities. Most are free to members. Watch the website for further details.

Classes

- March 2 Hopi Clan Migrations Instructor: Lyle Balequah
- March 9 Archaeology of the Verde Valley- Instructor: Ken Zoll
- March 16 Native American Traditional Agriculture In the Garden with Verde Valley Ancestral Gardens
- March 23 Sinagua cordage and sandal workshop Instructor: Justin Parks, M.A.
- March 25 Introduction to Dendrochronology Instructor: Nicholas Kessler, Univ. of Arizona
- March 26 Introduction to Dendrochronology Instructor: Nicholas Kessler, Univ. of Arizona

Lectures

Every Tuesday in March we will present a lecture by distinguished scholars on a variety of topics. All lectures will begin at **6:30 pm** in the **Camp Verde Community Library**, 130 Black Bridge Loop Road. All lectures are free and open to the public.

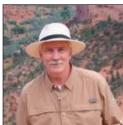
March 5 - Apache and Their Horses



It has been said that the Apache do not become Apache until the adoption of the horse, which triggered the raiding adaptation. Dr. Deni Seymour will explain that while horses played a central role in the Apachean world, the horse divide is not as pronounced as thought. Horses changed the ancestral Apache lifeway and horses survived and thrived without European horse culture. Horses shaped warfare and intercultural relations, were intertwined with family and inter-band relations, and were integrated into Apachean lives through use of horse power and in ceremonies. The horse is maintained in contemporary culture and archaeological traces document the historical role of horses in rock art, bones, landscape use, and artifacts. Dr. Seymour is an internationally

recognized authority on protohistoric, Native American, and Spanish colonial archaeology and ethno-history. For 30 years, she has studied the Apache, Sobaipuri O'odham, and lesser-known mobile groups.

March 12 - A New View on the Ancient Sinagua: Analysis of the Dyck Cliff Dwelling Collection



Excavated between 1962 and 1972, the large quantity of archaeological materials recovered from the Dyck Cliff Dwelling, located northeast of Montezuma Castle, were kept in storage for more than 40 years until they were donated to the Verde Valley Archaeology Center in 2014. Detailed analysis of the well-preserved wooden artifacts, colorful textiles, diverse ceramics, and remarkable food remains has provided new information about the prehistoric cliff dwellers who lived in the Verde Valley. Dr. Todd Bostwick, our Director of Archaeology, will explain how this magnificent collection has provided a new view of daily life of the Sinagua people.

March 19 - Studying and Interpreting Montezuma Castle's Architecture



National Park Service staff, Matt Guebard, Lucas Hoedl and Wendel Navenma, will talk about recent attempts to study the architecture at Montezuma Castle. This includes investigations of the building techniques and materials used to construct the cliff dwelling. Additionally, the presentation will discuss attempts to build a "replicate room" using local materials and traditional construction methods similar to those used at Montezuma Castle. By replicating these ancient building styles, the park has acquired valuable insight into the labor required to build a cliff dwelling and the potential environmental impact caused by collecting local building materials. This presentation will highlight

how the in-depth study of ancient architecture can produce important information about the lives and experiences of past people.

March 26 - Dating the Construction and Use of the Montezuma Castle Cliff Dwelling



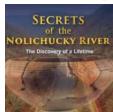
Dr. Greg Hodgins and Mr. Nicholas Kessler (PhD candidate) will discuss a recent cooperative research project between the National Park Service and the University of Arizona Accelerator Mass Spectrometry Laboratory. This project has utilized radiocarbon dating to better understand when the cliff dwelling was built and how its architecture changed over time. The presenters will discuss the methods used and preliminary results from the project. This presentation will highlight the use of cutting edge science to develop an interpretation of past events at Montezuma Castle.

HERITAGE AWARENESS MONTH

Films

All films will be shown at the **Camp Verde Community Library**, 130 Black Bridge Loop Road, on **Thursdays at 6:30 pm**. Two films will also be shown at the Sedona Film Festival's **Mary Fisher Theater**, 2030 Hwy-89A, Sedona, at **4:00 pm**.

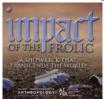
March 7 - Camp Verde Library



Secrets of the Nolichucky River (USA, 58 min)

Cane Notch, an archaeological site nestled alongside the scenic Nolichucky River of North Carolina and Tennessee, may hold the key to a missing link in Cherokee history. Join explorers from East Tennessee State University, using modern-day technology to see beneath the land's surface, as they uncover a Native American village in Upper East Tennessee. The perfectly preserved Cherokee village has been dubbed "a mini-Pompeii" by archaeological experts. Follow the team's progress as it discovers ancient artifacts and unlocks the Secrets of the Nolichucky River.

March 13 - Sedona Film Festival - 4:00 pm March 14 - Camp Verde Library - 6:30 pm



Impact of the Frolic (Advanced Laboratory for Visual Anthropology, Cal State Univ, 24 min)

In the summer of 1984, archaeologist Thomas Layton unearthed some unexpected Chinese artifacts at a Native American site in Mendocino County. Driven to discover their origins, Dr. Layton set out on a quest to solve the riddle of the mysterious potsherds. What he eventually uncovered was a story of vast cultural connections and a shipwreck that impacted California forever.



Chartres: Light Reborn (France, 52 min.)

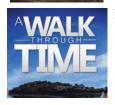
Chartres Cathedral, an icon of French Gothic architecture, underwent restoration of the nave between June 2014 and October 2016, the stained-glass windows on each side, and the first statues in the ambulatory. This documentary tells the story of the restorers, archaeologists, scientists, and architects who worked to complete this vast project.

March 21- Camp Verde Library - 6:30 pm



Torn (Advanced Laboratory for Visual Anthropology, Cal State Univ, 27 min)

For thousands of years, stunning petroglyphs on the volcanic tablelands near Bishop, California shimmered in the starlight, but then a menace struck. Looters with rock saws and chisels destroyed this ancient site leaving everyone with one question...why?



A Walk Through Time (Advanced Laboratory for Visual Anthropology, Cal State Univ, 28 min)

With its majestic landscapes, diverse wildlife, and a history spanning 14,000 years, Anderson Marsh State Historic Park is one of the most unique places in all of California. It is also the home of the Koi people who were the first humans to colonize the area and who are still there to this day. Their deep cultural heritage prompted the extraordinary events that led to the park's creation and reinforces the current struggles to protect the amazing resources that the park holds.

March 20 - Sedona Film Festival - 4:00 pm March 28 - Camp Verde Library - 6:30 pm



Stone Age Cinema (France, 52 min.)

According to groundbreaking discoveries, our prehistoric ancestors may have invented the concept while drawing on their walls. Over the past 150 years, we have discovered many examples of amazing prehistoric art, most of which are fascinating representations of animals. Today, a new reading of these paintings and engravings has revealed the existence of numerous cases of the breakdown of movement. A horse painting from the Lascaux caves in France, for example, is made up of many versions of the animal representing different positions of movement. Director and

archaeologist Marc Azema extracts these individual images and displays them in succession, demonstrating how they play back like a cartoon. This documentary takes us right back to the beginnings of man's artistic heritage to discover these graphic narratives, in a unique investigation into the cultural DNA of humanity.

The Camp Verde showing will be followed by a Question and Answer session with Dr. Kelley Hays-Gilpin, Professor of Anthropology at Northern Arizona University, and Curator of Anthropology at the Museum of Northern Arizona. She holds a PhD in Anthropology from the University of Arizona, and has visited some of the sites described in this film.

MEMBER SURVEY RESULTS

Last summer we invited members to complete an online survey to measure satisfaction with current services. We were very pleased to have received responses from 123 of the 485 members who were sent the survey. This return rate of 25.8% is at the high-end of typical satisfaction survey responses. Below are the results, which we have used in putting together the current fiscal year budget.

- 1. Do you plan to renew your membership when it expires? Yes -90/96% No -3/4% N/A -30 Life or Patron member
- 2. If you answered NO to the above, please let us know why. Too far away; undecided; long story
- 3. Are you aware of the Reciprocal Museum admission benefit at the \$100+ membership levels? Yes 89 / 72% No 34 / 28%
- 4. Do you read the Center's Quarterly newsletter? Yes -123/100% No -0
- 5. Do you prefer receiving the Quarterly newsletter in print? Yes -73/59% No online would be better -50/41% Next indicate the importance the following offerings with 5=Highest
- 7. Lectures -57/5 36/4 12/3 0/2 7/1 83% 5 or 4
- 8. Monthly eNewsletter -63/5 34/4 13/3 3/2 3/1 84% 5 or 4
- 9. International trips (Paquime, Belize, etc.) 15/5 10/4 21/3 18/2 41/1 23% 5 or 4
- 10. U.S. trips (Chaco Canyon, Hopi, etc.) 35/5 30/4 21/3 15/2 9/1 59% 5 or 4
- 11. The Quarterly newsletter 71/5 31/4 11/3 3/2 0/1 88% 5 or 4
- 12. Museum store discount 40/5 20/4 19/3 12/2 19/1 55% 5 or 4
- 13. Are you? A full-time resident 84 A part-time resident 17 AZ resident outside the area 14 Frequent visitor 8
- 14. If you are a part-time resident or visitor, when are you usually in the area (check all that apply)? January February March -- 17 April May -- 17 June July August -- 6 September -- October -- 9 November -- December -- 12
- 15. What do you like BEST about the Verde Valley Archaeology Center?
 We received two and a half pages of responses. The vast majority comments on the availability of educational opportunities including lectures, films and classes.
- 16. What do you like LEAST about the Verde Valley Archaeology Center?

 There were a fair number of responses like "Nothing" or "No complaints." There were several requesting more hikes and earlier lectures to avoid driving in the dark. We have started up the hikes again and are considering Sunday afternoon lectures.
- 17. How often do you visit the museum each year? 1 to 3 times 77 /65% 3 or more times 42 /35%
- 18. Who do you visit with? Check all that apply. Children 16 Friends 71 By myself 73
- 19. Have you attended any of the Member-Only previews such as for the Paul Dyck paintings? Yes 46 /38% No 75 / 62%
- 20. If you answered NO above, why not (check all that apply)? Inconvenient day 23 Inconvenient time 30 No interest 17
- 21. Would any of the following enhancements be of interest to you or your visitors? Interactive touch pad at each exhibit with more information 57 Mobil applications and smartphone tours 26 Expanded Native American art holdings for display 62
- 22. Have you attended any of the annual Archaeology fairs in March? Yes go to #23 69 /58% No skip to #27 51 /42% If "Yes", indicate the importance of the Fair offerings. 5=Highest
- 23. Fair Lectures 43/5 15/4 6/3 2/2 1/1 60% 5 or 4
- 24. Fair Films 37/5 12/4 14/3 1/2 3/1 73% 5 or 4
- 25. Fair Classes 25/5 13/4 13/3 7/2 4/1 61% 5 or 4
- 26. Fair Demonstrations 28/5 16/4 15/3 5/2 1/1 68% 5 or 4
- 27. Have you attended any of the classes at the Center? Yes -56 / 49% No please go to Item 28 59 / 51%
- 28. If not, why not: No interest 5 Cost of the class 3 Day/Time not convenient 30 Did not know about them 15
- 29. Please describe any classes that you would like to have the Center offer.
 - A variety of classes suggested included weaving, sandal and arrowhead making, and pottery identification. We will cover many of these during the upcoming March activities.
- 30. Please use this space to tell us anything you might want to suggest or comment on. Most comments here were complimentary with a few requesting hikes and classes on weekends. We will be holding classes during March on Saturdays.

This was a very helpful survey and we appreciate all the respondents and their comments. As mentioned above, we will offer more hikes, hold classes on Saturdays, and perhaps try some lectures on Sundays. We will also move our "Member Only" activities to Sunday afternoon when we are closed to the public, as this will not involve night driving.

We are always open to comments and suggestions, so please do not wait for a survey to let us know how we are doing.

VERDE VALLEY ARCHAEOLOGY FIELD INSTITUTE

When you have friends or relatives visiting the area, suggest a guided tour. The Field Institute offers several options to visit the National Monuments and Archaeological Conservancy sites in the Verde Valley. The tour stops can include:

Montezuma Castle -- The Monument includes a set of well-preserved Ancestral Puebloan cliff dwellings. The dwellings were built and used by the Sinagua people between 1100 and 1400. The main structure comprises five stories and twenty rooms, and was built over the course of three centuries.

Montezuma Well -- The "well" is a natural limestone sinkhole that contains Sinagua dwellings. The Well's steady outflow has been used for irrigation since the 8th century. Part of a prehistoric canal is preserved near the park's picnic ground, and portions of the canal's original route are still in use today.

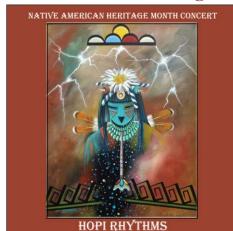
Tuzigoot National Monument -- This monument preserves a 2- to 3-story pueblo ruin on the summit of a limestone and sandstone ridge. The pueblo has 110 rooms built by the Sinagua between 1125 and 1400. It is the largest and best-preserved of the many Sinagua pueblos in the Verde Valley.

Yavapai-Apache Nation Cultural Center -- This stop includes the monumental sculpture to "The Exodus." Yavapai and Apache history spans several hundred years in the Verde Valley at a minimum. The tribes generally coexisted, as two culturally distinct groups in the country surrounding the Verde River.

Ottens Pueblo. Edgar Mearns, a US Army surgeon and naturalist stationed at Camp Verde from 1884 to 1888, visited Ottens Pueblo (often referred to as Sugarloaf Ruin) during his extensive study of ancient ruins of the Verde Valley.

Atkeson Pueblo, at the confluence of Oak Creek and the Verde River, has the tallest free-standing pueblo wall in the Verde Valley. Visit **www.ArchaeologyFieldInstitute.org** for further details.

Native American Heritage Month



The Center marked Native American Heritage Month with a concert on November 10, at the Phillip England Center for the Performing Arts. entitled "Hopi Rhythms" featuring the traditional, classical and contemporary musical talents of Hopi performers. This also a volunteer appreciation concert with free tickets to our many volunteers.



Gary Stroutsos, Jeffrey Koyiyumptewa and Clark Tenakhongva



Hopi Jr/Sr High School Classical guitar ensemble



Casper and the Mighty 602 Reggae Band





Verde Valley Archaeology Center ARCHAEOLOGY FAIR 2019



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