

Verde Valley Archaeologist

A Quarterly Publication of the Verde Valley Archaeology Center

Conservation - Preservation - Education

Autumn 2018

Sherman Loy Memorial Award

The Sherman Loy Memorial Award is given to an avocational archaeologist for outstanding efforts in the protection and promotion of the archaeological heritage of the Verde Valley. The recipient is chosen based on contributions to our knowledge of archaeology, active participation in the preservation or protection of archaeological sites, presentation of educational lectures or discussions, published books or articles, or who has worked closely



with organizations that contribute to the science of Anthropology.



At the Center's September 25 meeting, the 2018 Sherman Loy Award was presented to Jerry Ehrhardt of Sedona. Jerry graduated from the University of Maryland with a degree in mechanical engineering and was employed by the Department of Defense for 37 years. He is the consummate avocational archaeologist. He has been a

member of the Verde Valley Chapter of the Arizona Archaeological Society for 18 years, served as Chapter President in 1999 and 2000, and has been a member of the Verde Valley Archaeology Center since its inception in 2010.

In late 2000, he organized and initiated a survey program with the goal to locate previously unknown prehistoric archaeological sites in the greater Verde Valley. This effort has led to recording over 500 of these previously unknown sites. Many member have been on his "Tuesday death marches" which he has led with no apparent regard for his body or his vehicle. His field work is detailed and his site maps reflect a passion for precision with an artistic flair which are near legendary.

He is also a noted scholar and lecturer on the historic and prehistoric trails in the Verde Valley. He has been recognized by the Governor's Archaeology Advisory Commission with its 2007 award as the Avocational Archaeologist of the year.

Meet the Board

On September 19, the Board selected 'Prof' Roberto J. Ancis as the newest Board Member. We are very pleased to welcome Roberto who brings expertise and excitement to the position. Roberto provided the following introduction.

Most of us when young and middle-aged, seem to rush through life chasing personal and monetary objectives. Then, after so much 'running', we get to an age when we ask ourselves: "What am I leaving behind?", "What is my life legacy?"

I was born in Florence, Italy. I have been a scientist, strategic business advisor, and university associate faculty for over 37 years, teaching MBA capstones. Archaeology was part of my early-age upbringing, and continued throughout my life. Often archaeology is not perceived as a very exciting science and discipline, but it is!



I plan to donate my time to help the Board of Directors with their activities, and to investigate how modern technology can be adopted in the new museum VVAC is planning to build, so that archeological findings are integrated with "holographic" or 3D images, showing the lifestyles of the archaeological periods and how the artifacts were used.

Homestead Parkway Construction Begins

Yes, believe it or not, after several false starts, construction began during October with the installation of sewer connections to the Center's property and neighboring lots. It is anticipated that road construction will be completed by the end of December. There will be limited access to the trail during construction.





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.

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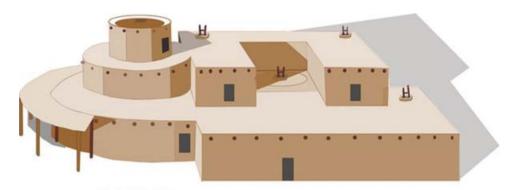
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President's Message

Dr. James Graceffa

The Center finished another successful Field School in Colorado. Field School is held each summer in Colorado for one or two sessions over four days each. We are still working at Mitchell Springs which is an Ancestral Puebloan site dating to Late Pueblo 1 phase and Pueblo 2 phase. With permission of owner and Principal Investigator Dave Dove, the Center and the Colorado Archaeology Society partner in these Field Schools. It is a fun time as well as a learning experience.

Mitchell Springs Archaeological site is a Chaco Great House outlier with a tri-wall tower Kiva. It was a large site with evidence of feasting. The occupation lasted for centuries, with structures being built over abandoned structures.



Mitchell Springs Pueblo A Great House & Tri-Wall circa A.D. 1130

on by David Dove



2018 Field School at Mitchell Springs





One member of the field school uncovers a large bowl

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IN THE MUSEUM: DENDROCHRONOLOGY

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.

If you have been to the museum recently you may have noticed a new display that includes a cross-section of a Ponderosa Pine from the Jemez Mountains in New Mexico. This sample has been loaned to the Center by the University of Arizona Laboratory of Tree-Ring Research in Tucson.

Dendrochronology was developed by astronomer A. E. Douglass in the 1920s. Douglas founded the Laboratory of Tree-Ring Research at the University of Arizona in 1937. Dendrochronology—or tree-ring dating—involves matching the pattern of tree rings in archaeological wood samples to the pattern of tree rings in a sequence of overlapping samples extending back thousands of years. These cross-dated sequences, called *chronologies*, vary from one part of the world to the next. In the American Southwest, the unbroken sequence extends back to 322 B.C.



In each growth season, trees create a new ring that reflects the weather conditions of that growth season. On its own, a single record can tell us only a little about the environmental conditions of the time in a specific year of the growth of the tree, and of course the age of the tree at felling, but when we put hundreds and thousands of tree-ring records together, it can tell us a lot more. Most importantly, assuming there are no gaps in the record (and even if there are short gaps), it can tell us the precise year that a certain tree ring grew. The potential then of what we may extrapolate from the tree ring data, is enormous. It is an accurate and reliable dating method with a large number of uses in environmental studies, archaeology and everything in between.

Dendrochronology operates on the principle that in temperate climates, like the southwestern United States, trees grow one ring every year. In the springtime when moisture surges, the cells of a tree expand quickly. Over the course of the summer as the ground becomes more dry, the cells begin to shrink. This change in cell size is visible in tree-rings, or growth-rings. The variation in ring width is based on the amount of water a tree absorbed in a given year. Rainier years are marked by wider rings, drier years by narrow ones. So, dendrochronology in its simplest form is a matter of counting rings. One ring = one year. Fifty-five rings on a stump = a fifty-five year old tree. But, it is not always that simple. Only about 40% of tree samples are successfully dated by dendrochronologists according to Ron Towner, Associate Professor of Dendroarchaeology at the Laboratory of Tree-Ring Research. Natural tree variation, sudden climate changes or if a tree is planted near a creek or a river where it may get more water, are examples where the rings no longer equate to each year elapsed. But for the 40% that are datable, counting the rings on a sample tells dendrochronologists how old the tree was when it was cut down.

However, counting alone does not tell dendrochronologists what time period the tree is from. To find that out, scientists must focus on the pattern of rings rather than number of them. For example, if you have a piece of wood from a tree and it has 500 rings, and



you find the stump of a thousand year old tree in the same forest, you could lay a cross section of that wood on top of the older stump and you would find that somewhere inside the rings of the older tree, 500 of them would match the pattern of the piece from the younger tree. In other words, tree rings develop in the same pattern (e.g., wide ring, wide ring, narrow ring, wide, narrow, etc.) in all trees across the same climate or region.

So, now we know how trees are dated, but what does that tell us exactly? All societies used wood in some fashion. This gives dendrochronologist the materials that can be tree-ring dated. This will result in precise years for when sites were occupied. Dendrochronology can also reveal the origin of the wood on a site, and by knowing when and where human activity occurred, archaeologists have a much better context for trying to understand the past.



2018 November 10 7:00 PM

NATIVE AMERICAN HERITAGE MONTH CONCERT



A benefit concert for the Hopi Educational Endowment Fund and the Verde Valley Archaeology Center Capital Campaign

HOPI RHYTHMS

Hopi Connections to the Grand Canyon - Songs and Video with Hopi Singer Clark Tenakhongva and World Flute Master Gary Stroutsos

Hopi High School Classical Guitar Ensemble

Casper & The Mighty 602 Reggae Band from Third Mesa

Tickets \$35 or \$25 All seating reserved

Tickets and information at www.PECPAF.com

INTERNATIONAL ARCHAEOLOGY DAY



Eighth Annual International Archaeology Day Benefit Theme: Steady Progress to the Future

Saturday, October 20, 2018 Sedona Poco Diablo Resort

6:00 PM Cocktails, Silent Auction and Raffle 7:00 PM Plated Dinner 8:30 PM Entertainment by Ed Kabotie's "One Man Jam"

Join us for a unique performance by Native American musician and artist Ed Kabotie. Kabotie is from the Hopi village of Shungopavi and the Tewa village of Khap'o Owinge, Santa Clara Pueblo, New Mexico. His culture is the greatest inspiration of his unique style of music, as he seeks to express the "virtues, vices and values" of his people. By mixing his languages (Hopi, Tewa and English), genres, and instrumentation, Kabotie creates powerful music that speak to the protection of the environment, the sacredness of water, and social justice issues facing his tribe and other Native Americans in the Southwestern United States.

Menu

Mixed Field Greens Salad with Sprouts, Cucumbers and Tomatoes Topped with a Balsamic Vinaigrette Dressing
Grilled Salmon with Lemon Beurre Blanc OR
Tender Medallions of Beef with Bordelaise Sauce OR
Grilled Southwest Eggplant with Poblano Chili Vegan Cream Sauce
Chef's Choice of Chocolate Dessert

Tickets are \$125 (\$75 tax-deductible) and available on our website or by calling the Center at 928-567-0066

Silent Auction and Raffle

In addition to the traditional silent auction, we will have a raffle for a number of donated items. Real bargains to be sure!

Since many members cannot attend the event but may be willing to support the Center through the Silent Auction, this year we will be offering the Silent Auction items for purchase prior to the event through our online Store at <u>vvarchcenter.org/store</u>. The site shows the estimated retail value of the item for nonmembers and a discounted amount for members. Of course, if you attend the benefit you will have the opportunity to place a lower bid and the item might go home with you at a great price. Here are some of the items:



A case of **Page Springs** 2015 GMCS.

46% Grenache
19% Mourvedre
19% Counoise
16% Syrah



One week (six nights) at Canyon Mesa Country Club. Two story townhouse with two bedrooms. Clubhouse pool and hot tub included.



Grand Canyon RR for two in first-class style, with oversized, reclining seats, plenty of leg room, and grand picture windows that enhance the scenic journey.



A two-night stay at the Sedona Poco Diablo Resort with breakfast for two. Adding to this package is a \$75 dinner certificate at Elote Cafe.



"Creator's Carving" by Randy Keedah. Framed giclee on canvas is 34" x 27.5" and signed on the back by Randy

And many, many more . . .









THE ARCHAEOLOGICAL RECORD - MITCHELL SPRINGS

President's Message continued from page 2





Learning about the ceramics that came from some of the excavation units at Mitchell Springs

The Center has been excavating in the Colorado sites for over eight years and plans are in the works for continuing next year so that more of our members will have a chance to experience field archaeology.

Back in Arizona, our Garden flourished over the summer and it received many compliments. People are coming in the Center asking how get to the trail and garden. We thank Gerry Quotskoyva and Kayo Parsons-Korn and all their volunteers for the dedication to this project. I am sure they could use a few more hands.

We had our first fall lecture on Tuesday Sept 25. Dr. Todd Bostwick gave a fascinating explanation of the Hohokam Canal System in the Phoenix Basin. At this same meeting, the Sherman Loy Memorial



Award was presented to an avocational archaeologist for outstanding efforts in the protection and promotion of the archaeological heritage of the Verde Valley. This year it was awarded to Jerry Ehrhardt for his outstanding work in Field Survey. In late 2000, he organized and initiated a survey program with the goal to locate previously unknown prehistoric archaeological sites in the greater Verde Valley.



This effort has led to recording over 500 previously unknown sites. This has greatly added to the Forest Service data base of sites.

This time of year we switch our energy from the Field back to the Lab. The Lab has been running on a skeleton crew. We look forward to the return of our volunteers because there is much to do, including some work at the Center's property. The volunteers who have dedicated themselves to analyzing, cataloging, inventorying and finally the data entry have been and are still a part of an exciting time for the Center. Soon we will be starting on new projects as more Contracting Archaeology firms are contacting the Center with inquiries about permanent storage of the artifacts excavated in the Verde Valley.

Lastly, the upcoming Gala at the Poco Diablo resort is our fund raiser for the year. The entertainment this year of Ed Kabotie is a performance you should not miss. His music and dialogue from a Hopi perspective will entertain you and question how you think about Native Americans. We have a full slate of great auction items, so if you can't attend, check out those items on line. You can bid from the comfort of your home. Please support our fund raising effort.

Thank you all for your support. Help us build the new facility. Get involved. The Center needs you.

Jim Graceffa, President

VVAC IS AN OPPORTUNITY ZONE!

A Compelling New Tax-Advantaged Investment for Capital Gains

A little-noticed provision of last year's tax reform push is starting to take shape, and according to an Urban Institute researcher, has the potential to become the nation's largest economic development program. The Center is exploring this exciting new investment opportunity to fund the construction of our Archaeology Campus. If you are planning to realize a sizable capital gain in the near future, or are simply interested in harvesting a portion of an existing unrealized capital gain, Opportunity Funds are one of the most exciting investment developments in recent history. Here are some details.

What is an Opportunity Zone?

An Opportunity Zone is an economically-distressed community where new investments, under certain conditions, may be eligible for preferential tax treatment. Localities qualify as Opportunity



Zones if they have been nominated for that designation by the state and that nomination has been certified by the Secretary of the U.S. Treasury via his delegation authority to the Internal Revenue Service. The above map shows the Camp Verde area that has been certified by the U.S. Treasury. Opportunity Zones are an economic development tool—that is, they are designed to spur economic development and job creation in distressed communities. The Camp Verde Opportunity Zone includes the property of the VVAC for our future archaeology campus and is the only Opportunity Zone in the entire Sedona/Verde Valley area.

How do Opportunity Zones spur economic development?

Opportunity Zones are designed to spur economic development by providing tax benefits to investors. First, investors can defer tax on any prior gains until the earlier of the date on which an investment is sold or exchanged, or December 31, 2026, so long as the gain is reinvested in a Qualified Opportunity Fund. Second, if the investor holds the investment in the Opportunity Fund for at least ten years, the investor would be eligible for an increase in basis equal to the fair market value of the investment on the date that the investment is sold or exchanged.

What is a Qualified Opportunity Fund

Qualified Opportunity Fund is an investment vehicle that is set up as either a partnership or corporation for investing in eligible property that is located in an Opportunity Zone and that utilizes the investor's gains from a prior investment for funding the Opportunity Fund. The VVAC is exploring ways to encourage the creation of an Opportunity Fund to finance the construction of the archaeology campus.

Do I need to live in an Opportunity Zone to take advantage of the tax benefits?

No. You can get the tax benefits, even if you do not live, work or have a business in an Opportunity Zone. All you need to do is invest in a Qualified Opportunity Fund.

If this opportunity holds any interest, please contact our Executive Director, Ken Zoll, for additional information.



While the Opportunity Fund is an exciting possibility, it is not a sure thing. Please watch your mail later in October for the Annual Year-End Appeal packet. We rely on the Year-End Appeal to cover our administrative expenses for the coming year. Please keep us in mind when planning your year-end tax planning.







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Gonzo's Landscaping LLC 928-254-7732





























