The generosity of our members and supporters has been tremendous during our Hope for Hopi campaign. The campaign ended with the last delivery of supplies on July 31. The total amount raised for supplies was $23,134.64. The few dollars that remain in the account will be sent to the Hopi Foundation, whom we have been working with on this project. Below is a partial inventory of just the July 31 delivery.

- 12 lbs of Organic Brown Rice
- 25 lbs of Pinto beans
- 7 boxes of small plastic gloves
- 2 boxes of medium plastic gloves
- 1 box of large plastic gloves
- 2 boxes of xlarge plastic gloves
- 177 One-size adult cloth masks
- 20 Child cloth face masks
- 51 Medium cloth masks with filters
- 49 Large cloth masks with filters
- 23 Face shields
- 500 x 8 oz hand sanitizers
- 114 x 5 gallon bottles of water

A huge thank you goes to members Dale Bellisfield and Jerry Eaton who purchased the items and made the many deliveries to Hopi.

The VVAC Archaeology Field Institute has launched a Distance Learning program. These courses are free to members but others are charged $49 for each course. The Site steward course is a service for the Site Steward program of the Arizona State Parks and Trails for individuals who wish to be a site steward for archaeological site protection. The VVAC is the regional coordinating organization for this area.

A course on the Prehistoric Astronomy of Central Arizona will come online in September. Other courses are being developed. Members will need to register for a course with their name and email address. A coupon code will be provided on request for a 100% discount for the course.

The Arizona Historical Society (AHS) Certified Historical Institution (CHI) Program is designed to support historical museums and organizations across the state of Arizona in their efforts to collect, preserve and share Arizona’s rich history. This program is open to brick-and-mortar facilities, as well as to historical organizations that fulfill certain requirements related to the preservation and sharing of Arizona history.

CHIs must demonstrate efforts to follow and apply standards or “best practices” established by the American Association for State and Local History (AASLH) and the American Alliance of Museums (AAM). We are very proud to have been reviewed by the AHS and to have received their designation as a Certified Historical Institution.

We will be loading our entire library holdings of hundreds of books and reports, plus many DVD movies, into the system that any YLN member can review online. We will not loan out any of our materials, except to Members, but nonmembers can come into the Center to review the materials (when we fully reopen).
Letter from the President

Several months into the COVID crisis, we hope our members are staying safe and well. The Center has been a quiet place with no visitors, volunteers or docents, but behind the scenes there has been a lot of activity. Executive Director Ken Zoll has been taking advantage of this “downtime” to do and write many things he would otherwise not have had time to address!

As mentioned in the previous newsletter, Ken wrote and inaugurated online courses on the Archaeology of the Verde Valley and on the Rock Art of the Verde Valley. Over 220 people have registered for these courses and the feedback has been very positive. Registration is free for Archaeology Center members and there is a nominal charge for non-members. Go to https://courses.vvac.org to access the courses or go to our website to access the courses.

On the third Saturday of every October, the world celebrates International Archaeology Day. Since we expect to still be “social distancing” at that time, the Verde Valley Archaeology Center will celebrate by holding its first ever VIRTUAL Gala on October 17. It will be approximately 45 minutes in length with speakers and entertainment. And of course, there will be a silent auction and raffle items available for review and bidding prior to the event. Mark your calendars! We are still in need of sponsors, raffle items and silent auction items. Our business community has suffered the last few months and understandably many who usually donate are unable to do so this year. Contact the Center if you can contribute!

The Center is planning to reopen on September 1. We successfully applied for grants for supplies to enable our "safe reopening." More details are elsewhere in this newsletter. We are thrilled to be able to share with the public once again. In anticipation of fewer available docents, there is a new Self Tour Guide and a separate guide on the expanded Dyck exhibits. We have changed out the textile items in the "regular" Dyck case and added an entirely new display of Dyck items. It now has several extremely interesting items as well as a new display board. Make your reservation to visit! We will limit reopening tickets to “Members Only” from September 1 through September 4 to allow members to get the first look of the new exhibits. You will also be helping us to “test” the new timed-entry system procedures.

We said goodbye to our bookkeeper, Diane Winter after 3 years of service. Thank you, Diane! We welcomed our new bookkeeper, Diane Happeny, in July. She is a Certified Public Accountant and also a Certified Internal Auditor. We are fortunate to have her on our team.

Thanks again to Ken and Susan King, our Office Manager, for keeping the Center running and in the public eye on social media. We look forward to welcoming our visitors, new and old, in September!

Stay safe!
Cheri
After a careful planning process, absent any alternative health advisory, we will be reopening our museum beginning September 1. The safety of our guests, employees, and volunteers is our priority. We continue to follow guidelines from the Centers for Disease Control and the Arizona Department of Health Services to allow guests to have a safe and enjoyable experience.

**Center Plans Safe Reopening September 1**

**Scheduled Self-Tours Only**

**Advanced Tickets Required**

**www.vvarchcenter.org**

or 928-567-0066

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**DAY** | **TOUR TIMES**
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Monday | Closed
Tuesday | 10:00 am - 12:00 pm - 2:00 pm
Wednesday | 10:00 am - 12:00 pm - 2:00 pm
Thursday | 10:00 am - 12:00 pm - 2:00 pm
Friday | 10:00 am - 12:00 pm - 2:00 pm
Saturday | 10:00 am - 12:00 pm - 2:00 pm
Sunday | Closed

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**Tickets will be required for timed-entry Self-Guided Tours at 10:00 am, Noon and 2:00 pm.** An admission fee has been instituted to help recover some new costs. The fee is $5 for adults 18-64, but free for those under 18 or over 64, as well as for members. HOWEVER, everyone needs a timed-entry ticket!

- Guests must acquire admission tickets (even if free) online by credit/debit cards. Onsite ticket sales can be arranged in advance by calling the Center at 928-567-0066 with a credit/debit card. Cash will not be accepted.
- Each timed-reservation is limited to one group of one to six individuals of the same household. There is a one-way route with exit in the rear.
- Masks or face coverings for museum guests, vendors, and visitors are required. Free masks are available. Staff will be wearing face coverings.
- Hand-sanitizing stations are throughout the exhibit areas.
- Guests will be given a free stylus to use on the iPads in the Yavapai-Apache Nation exhibit if desired.

We ask our guests to carefully review the list of symptoms below for COVID-19 provided by the Centers for Disease Control and Prevention. If you have had any of these symptoms in the past 14 days, please do not participate in a museum tour.

- Had a new fever (100.4 or higher, or a sense of having a fever)?
- Developed a new cough, shortness of breath, or a new sore throat, that you cannot attribute to another health condition?
- Experienced muscle aches that you cannot attribute to another health condition, or that may have been caused by a specific activity (such as physical exercise)?
- Been in contact with an individual who has been ill with respiratory complaints or fever, or who you know has tested positive for COVID?

We have taken the following internal steps to provide a safe experience:

- We have increased the sanitization schedule for public areas and high-touch surfaces.
- All contact points in the museum will be thoroughly sanitized before and after each use, focusing on door handles, hand holds, etc.
- As mentioned above, we have instituted a time-entry system for admission. This provides for a careful re-cleaning of visited areas between visitors.
- We have installed a professional air purifier as part of our proactive hygiene strategy.
- Daily temperature checks will be conducted on all employees. Docents will not be available at present. Guests may request a touchless temperature check.

If guests are not feeling well, or have a fever, we ask that they please stay home. If they purchased admission online, we will work with them to refund their ticket or honor it at a future date.
Dwelling, which I promptly bought and am carefully studying. I Googled Charles Rozaire and was delighted to find the Dyck Ranch dig just reported in the two volumes of *The Dyck Cliff Dwelling*, which I promptly bought and am carefully studying. Karen (Lundquist) Armstrong

When I was an undergrad student at Occidental College, fascinated with anthropology, I volunteered at the Southwest Museum. Charles Rozaire was there at that time, and was about to begin the dig at the Paul Dyck Ranch. I volunteered to join in the dig - having done several digs with other archaeological groups previously. Even my sister, Kris Lundquist, joined in during her spring break for the adventure. I wrote up a brief report on the Dyck Ranch dig for the Southwest Museum’s *Masterkey*. Which report was apparently the only report on the dig ever written - until Dr. Bostwick published in 2020. I had wondered whatever happened to that Verde Valley dig. I was recently asked to write a brief personal resume for the Maxwell Museum newsletter, which brought that dig to mind. I Googled Charles Rozaire and was delighted to find the *Dyck Ranch dig just reported in the two volumes of The Dyck Cliff Dwelling*, which I promptly bought and am carefully studying. Karen (Lundquist) Armstrong

**SOUTHWEST MUSEUM THE MASTERKEY**

DURING THE EASTER school vacation last spring the Southwest Museum excavated an old cave site on the Paul Dyck ranch in the Verde Valley of Arizona through the courtesy of the owner. The Dyck site is located about two miles north of Montezuma’s Castle National Monument, and both are on the bank of Beaver Creek, a tributary to the Verde River. Since the Dyck site is on private land and is not readily visible, it had not suffered the depredations of the pot hunter to any great extent. Mr. Dyck did state, however, that campers had removed two large vertical house posts from one of the three caves and used them for firewood. These had left large, easily recognizable postholes in the adobe wall constructed in the cave.

It was suspected that the site belonged to the Sinagua phase of Southwestern culture history (Montezuma’s Castle is also a Sinagua site), about which little is known. The excavation, under the direction of Dr. Charles Rozaire, occupied 10 days, April 8 to 18, 1962. It was greatly limited in scope because of the lack of time available and the relatively small crew, which was made up primarily of Dr. Rozaire’s students in archaeology from San Fernando Valley State College.

The site presented three connected "caves" to be dug. Two were of the open-faced rock shelter type, but the third was a full-fledged cave. This last, which we called the "kiva" for purposes of convenience, had only two main openings, a hole in the cliff overlooking Beaver Creek and an entry hole which communicated with the smaller of the two rock shelters. The series was placed in an eroded cliff on the west bank of the creek, on a ledge about 12 feet above the creek bed.

Features at once obvious were the postholes mentioned above and the remnants of an adobe structure which had divided the larger open cave into a four cell unit, with two living rooms (deduced from smoke blackening on the wall) above and two storage or other rooms below. There had been considerable collapse of the soft limestone in this larger open cave and on the walls and "ceiling" the Indians had constructed, and the debris presented an obstacle to excavation. For this reason, excavation in this cave was confined to the east corner and to the ledge immediately outside the cave. The smaller open shelter was about 10 feet in height and twice that in width. It had been divided by a neatly constructed adobe wall, most of which was still standing, into two rooms. The room to the east had apparently been another storage room, for it contained innumerable corn cobs and a storage cist or pit in its rear wall. The west room had a hard-packed small fire-pit (which we did not excavate) and a ledge in the rear by which access was gained to the "kiva."

The "kiva" had a fairly flat level floor (which stepped up about a foot in the east sector of the cave) and was high enough inside to stand in, except for stooping being necessary in the sloping corners. The cave had been occupied not only by Indians but later by bats and small rodents, and had been nearly filled with their refuse, according to Mr. Dyck, who had used this refuse for fertilizer on his pasturelands. During the course of the dig, excavations were made in the "kiva," in the larger open cave and on its immediate edge, and on the ledge or slough area in front of the smaller open-faced cave, which we did not have time to investigate except for removing the contents of the storage pit mentioned above.

The two prize finds of the dig were both found in the larger open cave, within one foot of one another and close to the east wall. These were the mummies of two small children, of apparently about the same age. They had both been buried in the extended position, were wrapped in burial cloths and had been mummified through dehydration in the dry Arizona climate. Burial 1 had a two-strand bead anklet around its left ankle. Corn and a small gourd had been buried with it, in addition to its elaborate wrappings. A fragment of black-on-white pottery was found in close association, which should help in dating the site. The second burial was found as we were excavating around the first body to remove it. This second child had also been wrapped in burial cloths, but with a cloth of simpler weave and much less of it. It was also much more decayed than the first burial. (Ed.: See a Dyck report pgs. 627-629 for more information.)

We found considerable amounts of various kinds of string, twine, netting and woven cloth in the excavations; most of this material had been manufactured from native cotton, but some yucca had also been utilized. In the "kiva" we found several large pieces of twilled yucca-leaf matting, for instance, and elsewhere a yucca-leaf sandal.

The botanic material recovered from the site indicated that these Indians subsisted largely on the corn-squash-beans diet typical of the area. The corn was predominantly the type known as Gila-Colorado and found mainly in that riverine area. Supplementing this basic diet, these Indians utilized whatever was available and edible in the environment: the Arizona black walnut, apparently a favorite food from the quantities of shells found, mesquite beans, acorns, and various berries and grasses. Continued on page 5
Decorated Reeds

Six reeds recovered from the Dyck Cliff Dwelling have designs burned into their exterior surfaces, four from Cist 5I and two with unknown proveniences (Figure 13.21). All of these are cut pieces of Phragmites stems, and all but one broken reed include a node at one end. Rollout illustrations have been created for two of the decorated reeds (Figure 13.22).

The longest decorated reed is 17.8 cm in length and 1.3 cm in diameter (Figures 13.21f and 13.22b). It has a worn area below the node where it appears to have been suspended by a cord. The geometric design consists of meandering lines and two “X” figures adjacent to the lines; these may represent birds, stars, or are just abstract elements.

Another elaborately decorated reed (Figures 13.21e and 13.22a) is 11.8 cm in length and 1.5 cm in diameter. Holes have been cut on opposite sides at one end of the reed, possibly for suspension from a cord. The geometric design includes wavy lines, zigzags, and dots in a complex pattern. A decorated reed 14.4 cm in length and 1.1 cm in diameter has been scorched on the bottom of its node and the opposite end is smashed and ragged (Figure 13.21c). The geometric design is a line with narrow triangles attached running at an angle down the long axis of the reed. Running triangles are a common geometric design on textiles from the Dyck Cliff Dwelling (see Chapter 10).

A smaller reed contains a burned geometric design as well (Figure 13.21d). This reed is 6.2 cm in length and 1.6 cm in diameter. Both ends have been carefully cut and ground, but the end opposite the node is smashed. Unlike the larger decorated reeds, the septum in this reed has been pierced. The geometric design is a series of closely spaced curved lines forming a semicentric circle, with the lines terminating at the end of the reed.

A sidewayl portion of a broken reed contains a geometric design consisting of a line with multiple ticks at a 90 degree angle to the line (Figure 13.21a). This broken reed has been cut on its node end and the opposite end is missing; it is 2.3 cm in length and 1.0 cm in width. Another sidewayl portion of a broken reed is 6.4 cm in length and 0.9 cm in width. This broken reed has six parallel lines running at an angle to the long axis of the reed with a series of four and six dots in between two lines (Figure 13.21b).

Very few bones of animals other than small rodents were found, so that we can surmise that we either missed them or that these Indians were not hunters (or at least not successful ones). They also made use of mescal (Agave parryi), chewing the fibrous leaves for the nutrient value and discarding the fibers in the form of a small cud. Considerable amounts of crude black pottery were recovered, this ware being quite rough and gritty both inside and out. Many sherdsof other types were also recovered, however, and after analysis should provide a clearer picture of the cultural relationship of this site.

Editor's Note:

It appears that the decorations are created by wood burning, or pyrography. The story of pyrography kept in step with man as he progressed through the ages, with wood burning techniques also evolving. Interesting and beautiful artifacts have been found in Peru and Roman Britain dating back to before the 1st century. It is unclear what method the inhabitants of the Dyck Cliff Dwelling used to make these decorations.
INSIDE THE VVAC

New Website Goes Live August 17

It had been our intent for some time to upgrade the website and the services we could provide. The closure of the Center provided an opportunity to spend the time to explore and select a new service. In addition, with the pandemic, it became necessary to initiate a “timed-entry” system for safe admission to the museum. This is a process that is being adopted by most museums today. Our current system could not handle this new requirement. We also wanted to enhance our ability to offer an online store and to go to digital membership cards. Again, the current system was not capable of offering these features.

We have spent hundred of hours over these past months creating this new website and installing the new services. We are pleased with the result and hope you will be as well. Please look it over when it goes live on August 17 - it is at the same address of https://verdevalleyarchaeology.org and let us know what you think.

New Online Museum Store

With the current health situation, it is recommended that museums not reopen their gift shops since it will require a very difficult cleaning process after each visitor. Instead, we have used the new website capability to offer an online Museum Store. The online Museum Store will offer the same, and more, books related to our mission. The Native American jewelry has also been added to the site as well as our stock of Mata Ortiz pottery. We will begin to carry more Hopi, Zuni and other Puebloan artwork as we develop the store’s offerings. We hope you will visit the new Museum Store for your personal and gift needs. Members will receive an automatic 15% discount at checkout.

Membership Cards Go Digital

With the new website and membership management system, we will be issuing digital membership cards.

Digital Membership Cards Save Time and Money

They reduce the time and costs of buying, printing, and mailing paper cards.

Digital Membership Cards are Convenient

Members will never forget their card. It will always be on your Smartphone. BUT, we will still issue a paper card on request.

Digital Membership Cards Save the Planet

Going green reduces our carbon footprint with an environmentally friendly option.

VVAC now supports digital mobile membership cards on Android and iOS devices. The Google Pay and Apple Wallet apps are included by default on all Android and iOS phones, so members do not have to install any new apps.

All current members will be receiving an email around August 17 advising them on how to get into the new system to download a digital membership, if desired. When a new or renewed membership is purchased, the receipt contains a link to retrieve the membership card. When members click that link on their phone, the system determines whether they are using Android or iOS, and displays the correct button to add the membership card to the device. A paper membership card can still be requested but the default will be to issue a digital card.
It is with great regret that due to the unprecedented global health crisis, we have decided to cancel the annual International Archaeology Day Gala that was scheduled for the Poco Diablo Resort on Saturday, October 17, 2020. The cancellation of the Gala, our most important fundraiser of the year, will have a substantial impact on our financial stability. However, we strongly believe this decision is in the best interest of our community’s health and well-being.

In lieu of the Gala, we will be hosting a Virtual Gala as a way for our friends and patrons to support the VVAC at this time.

We will have an online auction and raffle that will be available to bid or buy raffle tickets on October 11 at Noon and will conclude the night of the Virtual Gala, October 17, at 9:00 pm.

You do NOT need to purchase a ticket to the Gala to participate in the evening’s program or to participate in the auction or raffle. However, we are asking you to consider purchasing a Non-Banquet Gala Ticket for only $95. Those who purchase a Non-Banquet Gala Ticket will receive some special items available only to ticket holders. These will be described in a few weeks.

There will be a virtually “LIVE” program on October 17 starting at 7:00 pm for about one hour. The program details will be released in September but it will contain several short addresses from various speakers and live entertainment. Here are just a few of the Silent Auction items that will be available to bid:
Our Native American Garden 2020
by Rob Estrada, VVAC Archaeobotanist

I had the opportunity to manage the Heritage Garden on Homestead Street in Camp Verde. After some discernment, I accepted the challenge of being the new archaeobotanist for the garden. In the early days of the COVID 19 pandemic, the VVAC began to prepare for closing the center, yet NAU required additional internship hours from me. In early March, I met with volunteer Donna Ullner at the site. Donna informed me of the flora, which had been cultivated previously in each section. I decided to sow the corn where the bean field was planted for the two previous years. I concluded that the nitrogen levels would be rather high in those sections.

A bag of Hopi Blue Corn was given to me several years earlier, which I saved. From my previous experience at Montezuma Well, I learned that kernels will fail to germinate due to frost, when sowed too early. If I plant too late, stalks will not have sufficient roots to withstand the monsoon season. Donna and I shared our concerns, and we decided that plastic sheeting may be the answer. I brought out enough plastic to cover the entire plot of corn. I planted the seeds deep, the way Hopi farmer, Bertram Lomayestewa taught me. The plastic acted as a greenhouse allowing the soil to stay warm and to retain moisture for the young sprouts. We ended up with about a 70% germination rate, which is fair.

Most of the Hopi ‘Magic’ beans were planted along the perimeter with a melon plot, and sunflowers on the northside.

Donna began to prepare the soil under the Velvet Mesquite for an indigenous flower bed, and we both decided to germinate Cushaw Squash and Peppers. I also attempted to sprout peppers and Hopi Melons, while Donna worked on Amaranth and Navajo Melons. I have a small hydroponic system at home that I use for most of my germination, but soon discovered that this technique does not work with peppers, which prefer loamy soil. We both had good luck with the Cushaw Squash, so I germinated some Hubbaro Squash from Sonora while Donna presented a bounty of Amaranth to plant.

Before we could plant all the seedlings, the drip line system required a new layout. I decided to implement the miniature sprinklers for the flower beds rather than the bubblers, for better coverage and less puddling. In the cornfield, I removed most of the drips and used more bubblers. Then we added small drip lines with bubblers for the beans along the wall. The agave field outside of the wall needed some attention as well. Several of the succulents had perished due to overwatering. In one spot, I replaced the agave with a more appropriate Desert Willow, and in another, a Winterfat shrub. At the entrance are two Hedgehog Cactus, which are thriving. For most of the exotic varieties of Agave, the bubblers required tightening a bit to lessen the water flow. My biggest concern at this point are the rabbits which love nibbling on the tender ‘pups’ of the succulents.

If you decide to visit the garden this summer, you will notice that the cholla along the trail is beginning to grow new branches. The Velvet Mesquite will soon be approaching the flowering stage; the Amaranth has reached chest level with its radiant blossoms. The natural spatter of water from the sprinklers invigorated good germination of the perennials beyond the gate. To the left are the vibrant colors of Desert Marigold, Desert Blanket, Indian Blanket, Stemless Daisy, Mexican Poppies, Desert Lilly, Fire wheel, and Primrose. To the right, the corn is now finishing, with enormous sunflowers above and the orange squash blossoms below. For all of you ‘early risers,’ you will be treated to a plethora of pollinators excitedly traveling from one inviting host to another.

Thanks to these Employee Matching or Retiree Volunteer Grants