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Sample Application IGSM-251405-OMS-22
Project Category: Collections Stewardship and Access

Verde Valley Archaeology Center

Amount awarded by IMLS: $36,149
Amount of cost share: $13,100

The Verde Valley Archaeology Center will implement a collections digitization project to increase access to its Sinagua textile collection. The Sinagua were a pre-Columbian culture that occupied a large area in central Arizona including the Verde Valley. The center will purchase photography equipment, establish a digitization lab, and hire a freelance photographer to create digital images of the textile collection. The project team will expand the center's online virtual museum and enhance the archaeological record and metadata by adding 1,500 entries into the collections management system. The project will ensure the preservation of the fragile textiles, while providing broader access for scientific study, research, analysis, and examination. The expanded online content will benefit museum staff and the public by providing them with a better understanding and appreciation of Native American culture and history of the Verde Valley.

Attached are the following components excerpted from the original application.

- Narrative
- Schedule of Completion
- Digital Product Plan

When preparing an application for the next deadline, be sure to follow the instructions in the most recent Notice of Funding Opportunity for the grant program to which you are applying.

Narrative - Textile Digitization for Preservation and Public Access

Project Justification

In 2014, the Verde Valley Archaeology Center (VVAC) received a National Institute for Conservation and the Institute of Museum and Library Services (IMLS) grant to conduct a Conservation Assessment. Once the assessment was complete and recommendations were made, a 2015 IMLS grant allowed the VVAC to purchase improvement items for the collections facility. In 2017, another IMLS grant was received to expand our permanent exhibit on the history of the Yavapai-Apache Nation. The Yavapai-Apache are Indigenous to the Verde Valley and have inhabited the region since 2,000 CE. The accumulated support from IMLS has significantly benefited the quality of the museum and its exhibits.

The Verde Valley Archaeology Center's mission is to preserve archaeological sites and Native American collections, to curate the collections locally, and *to make them available for research and education.* Due to the progression of museum improvements, IMLS's and the public's support, VVAC has garnered substantial interest, so much so that the Center is relocating to a larger 11,000 sq. ft. facility. The new facility was purchased with the help of the Paul Dyck Foundation Research Institution of American Indian Culture and VVAC members. VVAC will move to the new facility and open to the public November 2021.

VVAC's collection encompasses over 80,000 Native American artifacts, textiles and remnants. VVAC has the largest and finest prehistoric textile collection in Central Arizona. VVAC's textile collection includes 14,100 textiles and woven materials from the Dyck Cliff Dwelling Collection. The textiles and materials radiocarbon date to 1155 – 1255 CE. The Center receives numerous inquiries from scholars, researchers, students, artists and the public at large in regards to the Center's textile collection, with particular interest in the textile's weaving techniques and the prehistoric natural dyes that were used. From a conservator's standpoint the textiles are extremely fragile and irreplaceable. Thus, current public access to the textiles are restricted. However, at VVAC's new facility the Center would like to create a Virtual Museum and provide online access to the digitized textiles for scientific study, analysis and examination. Ultimately, furthering VVAC's commitment to Native American culture and heritage of the Verde Valley.

It is of the utmost importance for VVAC to focus its attention on furthering textile collection stewardship, care, management and accessibility through the use of digitization. Digital imaging will ensure the preservation of the textiles, as well as the integrity of their current condition, while enhancing the archaeological record and metadata. During the textile's digitization process a textile can be photographed from multiple angles and in controlled lighting. Digitized images of a textile at various angles, close-ups and in controlled lighting will facilitate new research into the complex weaving techniques, dyes and colors that were used.

Digitizing VVAC's textile collection and uploading the images into a virtual museum platform will enhance accessibility to a broader audience. The VVAC requests support from the Institute of Museum and Library Services to begin the digitization of current holdings.

Challenges to Public Access

Providing broader access to our textile collection through research is highly limited due to the fragile nature of the textiles. If there is a request to view an archived textile for research purposes, a volunteer and/or curator must undergo the process of physically retrieving the artifact and supervising an in-person analysis of the textile – ultimately deteriorating its preservation. VVAC does not have the advanced tools needed to provide digital public access. Another challenge is the geography of where research is being conducted. If the textile collection was digitized, then we would be able to upload digital content to VVAC's website. Essentially providing global access to the textile collection and at various categories, high level researchers and the general public.

Digitization of VVAC Holdings

The VVAC's proposed solution is to establish a state-of-the-art digital photography laboratory within the new facility and provide professional training to staff to digitize textile items approved by our Director of Archaeology and Director of Collections and Exhibitions. VVAC received a grant award notice on August, 31st 2021 for a grant from the Arizona Historical Society to purchase a Virtual Exhibit (VE) module, managed by our current PastPerfect museum software, to feature textile digital imaging and data for public access. The digitization project will be conducted in two phases and under a single timeline. Public access to the Virtual Museum portal will be provided through the Verde Valley Archaeology Center's website. When the selection process commences, the textile artifacts chosen for digitization will rely on the significance of the textiles and how they contribute to the collection as a whole. When the textiles are successfully digitized then VVAC can focus to further digitize the Dyck Cliff Dwelling Collection and items that are of priority.

Audience Served

The intended beneficiaries of this digitization project will be researchers, scholars, students, artists, the general public and VVAC staff. The digitization of our textile collection will also aid in academic partnerships. VVAC has a Youth Educational Program; however, due to the COVID-19 Pandemic there is the strong need for online and distance learning programming. With funding for digitization, VVAC volunteers can then demonstrate to teaching professionals how to access the online textile collection via the virtual museum.

Advancing our Strategic Plan

The VVAC fulfills its mission as an archaeological research center, a museum intended to advance the public's understanding of how the science of archaeology is used to reconstruct the Native American prehistory of the area. Our strategic plan focuses our activities on six broad strategic initiatives. This project will advance two of these six initiatives:

1.) *To provide enriching educational experiences*
   From a wider lens, the project benefits the greater public by allowing online accessibility of holdings and resources on Verde Valley archaeology. A virtual museum will provide global scholarly research, educational resources and teaching tools.

2.) *To promote heritage tourism.*
   By digitizing VVAC textile collections, the organization is preserving the cultural history of the Sinagua, a group recognized as Hopi ancestors. Long-term benefits of digitizing artifacts of Sinagua heritage include; providing more opportunity for the public to learn about the Sinagua and promote appreciation for Native American cultural heritage. Currently, our advisory committee includes Hopi Cultural Director, Stewart Koyiyumtewa, to approve the methods in which the tribe's history is told in our museum and the proposed virtual museum that will showcase the digitized textiles.

IMLS Goals Addressed

- *Provide a rich learning experiences for individuals of all ages, backgrounds, and circumstances* – The presentation of representative textiles through a Virtual Museum will provide all members of the public with a unique learning experience through a digital platform.
- *Support partnerships aimed at assessing and addressing the needs of their communities* – The digitized textiles will be a resource for Hopi researchers and Hopi weavers. Providing the Hopi community, the opportunity to further examine their tribe's heritage.
- *Strengthen the role of museums as trusted stewards of the collections in their care* – Having a Virtual Museum will improve curation procedures and lessening the need to remove artifacts from exhibits or storage, the VVAC can become better "trusted stewards" for other archaeological collectors.
- *Expand access to collections and associated resources* – The purpose of the digitization project is to expand access to our collections. Museum docents are often questioned by visitors on the contents of our archive. There will never be an opportunity to showcase *all* artifacts due to the overwhelming size, but it is possible in a digital space.

Project Work Plan

The digitization project work plan was constructed by the project staff during the Fall of 2021 and led by the VVAC's Director of Archaeology. The project is to be completed in-house with current professional volunteer support, avoiding the need for any extraneous insurances or compliance policies. Work-days for the digitization project will be integrated in the regular volunteer conservator schedule, which includes two full days a week. Dissemination of project results will be led by the VVAC Director of Archaeology and would work collaboratively with the Director of Collections and Curation on how to use the digital lab for further projects and the Virtual Museum for advancing collection care, scholarly research academic partnerships.

Care of Collections

The VVAC prioritizes careful and compliant handling of artifacts to obtain project results. The extraction of artifacts chosen for the photographing and digitization process will first need an "Image Use Permission Form" (Attachment 1). Lead conservators, J. King will then refer to the organization's "Collections Management Policy for Permanent Collections" (Attachment 2) to proceed with the transfer of artifacts from the archive to the digital photography lab.

Volunteer conservators will also assist in helping with the project under the direction of lead conservators. Volunteer conservators will already have been cleared of their eligibility to handle VVAC holdings. The digitization project will include volunteers that already work on curation projects and work-days for VVAC. Proper VVAC supervision to the contracted photographer will be given to ensure the safety of the textiles during the entire digitization process.

Project Timeline

• September - November 2022: Digital-lab equipment will be purchased and assembled in a designated area of our museum after final review. An existing room in the new facility will be converted into a studio and will require minimal physical changes to the space. During this time, staff will conduct a call-out for a contracted photographer and hire accordingly.

• November - December 2022: Following standard guidelines by the National Park Service *Museum Handbook* (Part II, Appendix K- Photography), conservator staff will develop a written procedure on how the Verde Valley Archaeology Center will work with a photographer to remove textile artifacts from the repository to the studio. Purchase and installment of the PastPerfect Virtual Exhibit module will also occur.

• January 2023- May 2023: Phase 1 of digitization including the first 1,000 textiles.

• February 2023 - June 2023: As images become ready to upload to the Virtual Museum in PastPerfect, conservator staff will train volunteer curators on how to upload photos and textile data description to the module.

• May 2023: Evaluation of Phase 1 will begin. This will review the procedures and practices, as well as the quality and completeness of the digital images. This process may run through May 2023 if some images need to be retaken. Leading up to the evaluation, the selection of the remaining 500 textiles will be directed by the Director of Archaeology.

• June 2023: Phase 2 of digitization including the last 500 textiles will begin. Phase 2 procedures are expected to be the same as Phase 1 with final uploading to take place during Summer 2023 and evaluation to follow into the Fall.

• February 31, 2024: The work plan permits a 60-day delay prior to the end-date for the purpose of generating a final report to be administered to IMLS. This 60-day period also provides extra time for any digitization complications and/or risks that may have occurred.

In review, potential risks in the timeline may include the availability of a contracted photographer. The conservators may not have access to a photographer's time *every* two full

days every week; however, VVAC will ensure the availability of a back-up photographer with similar qualifications. Not meeting Phase 1 and Phase 2 completion deadlines due to technical difficulties is also a risk-factor; however, the 60-day buffer is a proactive solution.

Project Results

Increasing public access

The intended results of the project are to create 1,500 digitized textile entries into the PastPerfect Virtual Museum without inflicting any preservation damage on collections. Researchers, scholars, students and educators who are not able to make in-house visits to our museum will be able to access online textile materials to enhance their research and also promote classroom and online distance learning on Verde Valley archaeology topics. By producing the intended results, VVAC project staff prioritize the care of the textiles above all else during the project facilitation; to maintain the quality of chosen artifacts, current curation policies will be followed.

Digitization and Public Outreach

The VVAC intends to use the Virtual Museum in organizational marketing, public and community outreach, preventing the online tool from being a stagnant webpage. Project results will be shared in a press release following the completion of the project, as well as Verde Valley Archaeologist Quarterly publication and social media platforms. Additionally, the Executive Director will draft a specific outreach document for researchers, educators and academic partners to ensure their awareness of the online resource and how to use it best.

In order to sustain benefits to Virtual Museum users, project staff will conduct a yearly assessment survey of the PastPerfect Module's accessibility and ease of use. Success will be measured by analytics gathered on PastPerfect on the number of users accessing the online PastPerfect link. Long-term monitoring and its success will equate to the number of academic reports that cite the use of the virtual museum.

Conclusion

With the establishment of an online virtual museum the digitization project will feature the Dyck Cliff Dwelling textiles will help VVAC's online presence but most importantly make exceptional prehistoric textiles available for research and scholarly pursuits. Preserve the fragile and delicate artifacts that, with time are likely to degrade.

Schedule of Completion

Project Year 1

September 1, 2022 – November 30, 2022:

- Digital-lab equipment will be purchased and assembled in a designated area of our facility.
- An existing room in the new facility will be converted into a studio and will require minimal physical changes to the space.
- During this time, staff will conduct a call-out for a contracted photographer and hire accordingly.

November 1, 2022 – December 31, 2022:

- Following standard guidelines by the National Park Service *Museum Handbook* (Part II, Appendix K- Photography), conservator staff will develop a written procedure on how the Verde Valley Archaeology Center will work with a photographer to remove textile artifacts from the repository to the studio.
- Purchase and installment of the PastPerfect Virtual Exhibit module will also occur.

January 1, 2023 - May 31, 2023:

- Phase 1 of digitization including the first 1,000 textiles.

February 1, 2023 – June 31, 2023:

- As images become ready to upload to the virtual museum in PastPerfect, conservator staff will train volunteer curators on how to upload photos and textile meta data description to the module.

May 2023:

- Evaluation of Phase 1 will begin. This will review the procedures and practices, as well as the quality and completeness of the digital images. This process may run through July 2023 if some images need to be retaken. Leading up to the evaluation, the selection of the remaining 500 textiles will be made by the Director of Archaeology.

June 2023:

- Phase 2 of digitization including the last 500 textiles will begin. Phase 2 procedures are expected to be the same as Phase 1 with final uploading to take place during Summer 2023 and evaluation to follow into the Fall.

Project Year 2

September 1, 2023:

- Continuation of Phase 2 digitization.

February 29, 2024:

- The work plan permits a 60-day delay prior to the end-date for the purpose of generating a final report to be administered to IMLS. This 60-day period also provides extra time for any digitization complications and/or risks that may have occurred.

Part I: Intellectual Property Rights and Permissions

A.1 The Verde Valley Archaeology Center (VVAC) will hold copyrights to the digital images. Property rights and Permissions will be explained on the Virtual Museum website introduction. In addition, the Center has a "Permission to Photograph or Film Center Collections" release form for researchers to complete that explains rights and permissions.

A.2. The Center currently has a "Permission to Photograph or Film Center Collections" release form (additional attachment) that will be required for anyone wishing to use a digital image resulting from this project. This form explains terms of access. Images taken will be in full-format size for the digital library. However, Virtual Museum images will only be 450 pixels wide, which are suitable for viewing but are small for printing to deter people trying to copy online images. The Permission form will be needed to obtain full-size images. All Virtual Museum images will be protected using PastPerfect's Virtual Exhibit's watermark feature.

A.3. None of the items selected for digitization for the Virtual Museum will involve any such issues.

Part II: Projects Creating or Collecting Digital Content, Resources, or Assets

A. Creating or Collecting New Digital Content, Resources, or Assets

A.1. The Center will initially digitize images of selected artifacts in the Dyck Rockshelter Collection. This first phase of the project will capture 1,500 items in RAW for the digital library and in JPEG for use in the PastPerfect Virtual Exhibit module. Upon completion of this phase, an additional 1,500 images will be digitized from other locally acquired collections.

A.2. The project includes equipment for the photographic studio (camera, lights, etc.) plus post-production software for image color correction and sizing. Additional software will include the PastPerfect Virtual Exhibit module. Image backup drives and offsite storage space is included. Labor will be contracted to a local photographer.

A.3. Digital images will be created in RAW and JPEG formats. JPEG images intended for the Virtual Exhibit will be created to a maximum of 450 pixels width with a resolution of 72 pixels/inch.

B. Workflow and Asset Maintenance/Preservation

B.1. At least every two weeks, the digital images and metadata will be reviewed by the Conservation Database Administrator for completeness of the metadata and quality of the images.

B.2. The VVAC disaster recovery plan ensures that data are protected and that recovery of data will be fast enough to bring the institution back up and running. The VVAC employs the 3-2-1 backup strategy of having at least 3 total copies of data, 2 of which are local but on different devices, and 1 copy offsite. The initial images will be stored on the dedicated computer (copy 1). As part of the backup process an external hard drive will be used to back up the images (copy 2). In addition, the Carbonite online backup subscription will continuously scan the computer and uploads data offsite to their datacenter (copy 3). The Carbonite subscription is part of the annual budget and will continue after the award period.

C. Metadata

C.1. The Center uses PastPerfect museum software for accession information, location, and description. We will use PastPerfect for item-level description of the digital capture of collections items.

C.2. The grant request includes a dedicated personal computer with image processing software to store the captured images in the RAW and JPEG formats. An additional hard drive will be used for local preservation. In addition, more storage space will be purchased from Carbonite for daily offsite backup. The annual subscriptions for Carbonite will be maintained after the project period.

C.3. Data sharing will be with the Virtual Exhibit module of PastPerfect. Project objects will be identified from the PastPerfect Objects catalog to include with select data fields. Common fields to include will be Object ID, Object Name, Date, Title, Search Terms, Subjects. This data will be sufficient for the general public's purposes and enough for a researcher to identify and request the larger image and complete metadata catalog of the item.

D. Access and Use

D.1. The digital content for public access will be with the Virtual Exhibit module of PastPerfect. Virtual Exhibit converts selected collection records and images from PastPerfect to HTML for posting on the web. The Virtual Exhibit will link to our main website. Visitor Use Statistics will be used to track the number of visitors to the Virtual Exhibit.

D.2. An FY 2018 IMLS Museums for America grant allowed us to create an expanded exhibit on the Yavapai-Apache Nation. A part of the exhibit includes interactive touchscreen kiosks. This feature is also available on the Center's website at: https://www.verdevalleyarchaeology.org/Exhibits.

Part III. Projects Developing Software – NOT APPLICABLE

Part IV: Projects Creating Datasets – NOT APPLICABLE