Conservation Assessment:
CAP Report for Collections

The Verde Valley Archaeology Center
Camp Verde, AZ

Funded By
The Heritage Preservation

Survey: June 24-25, 2014
Final Report: September 1, 2014

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EXECUTIVE SUMMARY

1. General Information.
The collections of The Verde Valley Archaeology Center (VVAC) are administratively one museum and represent archaeological objects, some artistic/ethnographic items, a few historical artifacts, and archival documents. Exhibition case spaces are provided to the Yavapai-Apache Nation to present various ethnology objects for educational interpretation. The Verde Valley Archaeology Center was formed in 2010 first opened in 2011 and has been in the current location since November 2012. The archaeological record that is represented in the collections includes pottery, projectile points, clay figurines, assorted lithic, stone tools, decorative items, and woven fiber. The VVAC was created to address the issue of artifact removal from the area for curation elsewhere. There is ongoing general use of the collections in interpreting cultural history to a broad audience of visitors.

Staff members are completing the integrated physical inventory and processing of the archaeological collections with their associated field records that will assist in determining the research potential of specific items for further interpretation, preservation, or de-accessioning. Re-housing the collections, both archival and artifact, from the storage containers to the museum building has been an outstanding effort. Excellent work has also been done to develop and refine policies and procedures for the collections.

Verde Valley Archaeology Center, VVAC, information refers to the institutional mission as “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”. (Approved 2011).

Organizational objectives discussed during the CAP site visit for the VVAC include:

- Promotion for the maintenance and expansion of The Verde Valley Archaeology Center
- Promotion for increased public interest in archaeology and the VVAC museum as a home for the items found in research or regulatory compliance excavations as well as private collections.
- Promotion of the prevention of vandalism, pilfering of artifacts, and profiteering in any way from sites of archaeological importance
- Promotion of research pertaining to Human habitation of the Verde Valley and to publish and make available the results of such research.

The museum has achieved an impressive number of preservation related activities for its buildings since its founding and illustrates a strong commitment to collections care. Maintaining an ongoing list of these is important accomplishments (new storage furniture or exhibit cases) is information the museum can use in many ways to illustrate ongoing effort.

2. Staffing.
The Museum has a small staff. The job descriptions that were provided do not refer to preservation of the collections. Awareness and consideration of preservation for the collections
(including handling, maintenance, and preservation of information) should be a concern to all employees, board members and volunteers and should be reflected in the job descriptions.  p 11.

3. General Building.

Camp Verde, where the Museum is located, is situated between the larger cities of Phoenix and Flagstaff to the east of Interstate 17. Though considered temporary, the 3336 sq. ft. building is located in the center of town on Main Street, it is owned by the town, and has been modified to suit the VVAC program.  p 14.

4. Climate Control and Environment
The VVAC has climate control and the building manages to maintain a good environment for collections. The VVAC has HVAC and does monitor the building with basic thermo-hygrometers and thermostats. The thermo-hygrometers appeared to have been out of calibration. Lighting consists of fluorescent fixtures and glass windows and doors at the entrance. Pollutant dusts do not appear to be a significant indoor problem. Significant infestations by insects have not been reported in the museum building.  p 15.

5. Collections and Collections Policies
The current procedures for collections management have been carefully thought out. The Director of Archaeology overseas catalog records and standard collection management forms. The PastPerfect® computer collections management program has been an important tool. A well-articulated Scope of Collections Statement and related Collections Policy documents could be refined to better establish the priorities, needs, and direction for management and preservation of the collections.  p 23.

6. Storage
Considerable attention to the collections in storage has begun. Storage equipment improvements, inventory and organization are areas needing consideration. Space utilization in storage rooms deserves further study. Attention to the preservation, storage space, and interpretive needs of any new items to the collections is especially important as the museum refines the scope of collections. The layout of space within the structure deserves further attention. Planning of space in a new facility will also require conscientious planning.  p 28.

7. Exhibits
The museum exhibit area utilizes a collection of objects received as a long-term loan from the Yavapi-Apache Nation. The Nation was not comfortable housing items from outside their culture and offered them to the VVAC. Five exhibit cases include historic Civilian Conservation Corps made for the Tuzigoot National Monument that became available after renovations there are loaned to the VVAC. Other display cases have been obtained and are also considered a short term solution. The exhibits appear to be well organized and maintained. Handling and housekeeping have been addressed.  p 31.

8. Emergency Preparedness and Security
The VVAC has recently undergone substantial emergency preparedness planning.  p 33.
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INTRODUCTION

On June 24 and 25, 2014 a CAP survey was undertaken at The Verde Valley Archaeology Center (VVAC). This is the first Conservation Assessment Program (CAP) survey done at the museum. The museum requested this project because they would like (1) to develop a long-range preservation plan, (2) to use the CAP as a tool to obtain funding for collections care (3) improve collections care, (4) improve environmental conditions, and (5) improve the preservation of the building. The CAP application was written by Mr. Ken Zoll (Executive Director). He coordinated the site visit and prepared the various internal documents and other background information materials needed for the assessment. The following information was provided for use in preparing this report.

This CAP survey included an on-site visit by collections conservator, Dr. Nancy Odegaard who was accompanied by Post Graduate Fellow Crista Pack (2013 Winterthur/University of Delaware MS graduate), Conservation Lab Coordinator Gina Watkinson (2013 University of Arizona MA and Heritage Conservation certificate graduate), and Graduate Intern Madeleine Neiman (2014 University of California-Getty MA graduate). The VVAC building is not an historic structure so a historic preservation architect was not included in the CAP project. This Report is designed to be useful tool for creating a Long-range Preservation Plan outline and may influence ongoing policies and procedure development for collections care.

The majority of the on-site days were spent in tour and discussions with Board and staff members. An overview tour was provided of the VVAC building on the first morning and also included discussions with Director of Archaeology (Dr. Todd Bostwick), and eight board members including officers: Dr. Jim Graceffa (President), Mary Kearney (Vice President), Lynette Kovacovich (Secretary), Bud Henderson (Treasurer), and many other volunteers. Advisory Council member, Peter Pilles (NFS) was present on the first day.
A public lecture was provided as a VVAC event by CAP Assessor Dr. Nancy Odegaard on the evening of June 24 at the Yavapai-Apache Cliff Castle Casino Hotel. The lecture was attended by about 120 people and was entitled: *Preserving Our Human Heritage: How Curating and Conserving Kennewick Man has Influenced the Care of Human Remains in Cultural Institutions.*

Lunch was arranged by museum staff on both days. Accommodation for two nights was at a local hotel. The second day continued the review of specific areas and facilities used for collections processing, storage and exhibition.

The following items were provided for review and consideration of the CAP survey:

2. Promotional and Educational items:
   - Brochure: *Verde Valley Archaeology Center, Exhibits, Displays, Research*
   - Brochure: *Explore; the archaeological heritage of the Verde Valley*
   - Post card: *International Archaeology Day Gala*
   - Brochure: *Protecting the Ancient Cultural Heritage of the Verde Valley*
   - Book: *Sinagua Sunwatchers* by Ken Zoll, 2008
   - Newsletter, *Verde Valley Archaeology Quarterly*, Spring 2014
   - Video: *A History of the Verde Valley*, [http://www.youtube.com/watch?v=XZQCjXP4m3c](http://www.youtube.com/watch?v=XZQCjXP4m3c)
3. Area information
   - Newspaper: *Northern Arizona News*, 2014 season
   - Newspaper: *Yavapi Health Wellness*, June 2014, Verde Valley Edition
4. Curation Documents
   - Curatorial Policies and Procedures (CD); including 8 folders of information text/forms.
   - Acceptance/ Rejection of a Donation; Temporary Custody Receipt; Collection Use Agreement; Guidelines Review for Private Collections
   - Request for Collections Access; Permission to Photograph Collections
   - General Instructions for Entering New Project Forms (May 4, 2014)
5. Organizational Profile
   - Mission Statement, 2011
   - Bylaws of the VVAC, Inc. (as amended through 6/19/2013)
   - Organizational Chart
   - Income Statement, Jan-June 2014
   - Website information: http://www.verdevalleyarchaeology.org/

6. Preventive Conservation Plan
   - Incident Information Form (1 page)
   - Visual Inspection Record after Environmental Event example; April 9, 2013


8. Position Descriptions
   - Executive Director
   - Director of Archaeology
   - Administrative Assistant
   - Duties and Responsibilities for President, Executive Director, Director of Archaeology
   - VVAC Orientation Procedures
   - Volunteer Personnel Job Codes and Hour reporting

9. Floor Plans
   - The Verde Valley Archaeology Center facility on Main Street.
   - Schematic Concept Map for Phase I and Phase 2 VVAC and Museum Complex

10. Grant Proposal Narratives
    - NEH 2013 Preservation Assistance for Small Museums Grant, $6,000, not funded

The pressing need for the VVAC is to determine the future size and location of their new facility. They have undertaken an aggressive and comprehensive approach to the study these topics and have provided extensive evidence that they can professionally manage the growth of collections and their mission.

I. GENERAL INFORMATION

Location

The Verde Valley Archaeology Center is located in Camp Verde, Arizona east from exit 287 on Interstate Freeway 17. The town of Camp Verde has a population of about 11,000, sits at an elevation of 3,147 feet near the banks of the Verde River, and is surrounded by mountains. The Verde River (Haka'he:la in Yavapaí) is a perennial stream that flows freely through private, state, tribal and US Forest service lands. The valley is green (verde in Spanish) and known for its rich geologic, riparian, archaeological, historic, and current American Indian history.

The first written notice of this region may be in the expedition report of a wealthy Spanish explorer, Antonio de Espejo [1540-1585], who visited in 1583. Prospecting for gold and silver
began in the 19th century and American settlements followed around the Verde Valley between 1865 and 1914 to serve needs of the mining and military encampments in the area.

Indigenous heritage in the area is recorded in the archaeological record that survives. Based on Clovis projectile points, archaeologists think that Paleo-Indians lived and hunted in the area from 11,000-12,000 BCE to 9000 BCE. Archaic hunter-gathering people lived in the Verde Valley between 9000-3000 BCE to 300 CE who also made use of vegetable materials for technology and food and created rock art. Southern Sinagua people entered the area around 650 CE and until 1450 CE they lived, farmed, hunted and built structures.

Today, American Indians represent 7.25% of the Camp Verde population. The Verde Valley has been home to the Yavapai-Apache Nation, a sovereign Native American Tribe since 1934. Archaeology suggests that the Apache people entered the area between 1275-1400 CE and the Yavapai people around 1300 CE. They represent two culturally distinct backgrounds and languages but have co-existed for hundreds of years. The Yavapai or Pai, from the west and south are Yuman speaking and the Apache, from the north and east are Athabaskan speaking. In 1873-1875 they were rounded up by the US military and held at the Rio Verde Reservation and were then moved to the San Carlos Indian Agency until 1900. Their Administrative Complex, Tribal Court, Council Chambers and Casino are located at Camp Verde.

The town of Camp Verde grew around Fort Verde. Beginning as a military establishment overlooking farms, Camp Lincoln was established in 1865 and the name was changed to Camp Verde. In 1871 the post was moved and the name was later changed to Fort Verde. It was officially closed in 1890. The buildings of Fort Verde became an Arizona State Park in 1970.

The Verde Valley is anchored by several towns including Camp Verde, Sedona, Cottonwood, Clarkdale, and Perkinsville that each has a different character. Along with a strong Wild West feel, the Verde Valley has both resorts and poverty. A report entitled, Achieving a sustainable and diversified economy in the Verde Valley (2004) by the Rural Policy Program at Northern Arizona University, outlines a number of facts and observations that may be useful for planning a larger archaeological center.

http://azmemory.azlibrary.gov/edm/ref/collection/statepubs/id/2777

For example:

“Our quality people tend to be older retirees or younger retirees in their fifties and sixties. They're wonderful educated people but the young people who want to work are not terribly educated and have a lack of a work ethic.”

“Tourism Views about tourism's role in the Verde Valley are mixed. It is acknowledged that tourism is a dominant sector in the region, but people do not agree on whether that is good for the economy. One reason people want the economy to diversify beyond tourism is the proliferation of low wage service jobs in the industry. Another viewpoint is that tourism is in place now, the region will always attract visitors, and tourism can and should be further developed and diversified.”

Major archaeological attractions in the Verde Valley include:
National Park Service sites:
- Montezuma Castle National Monument and Montezuma Well. (visitor center exhibits)
- Tuzigoot National Monument (visitor center exhibits)

National Forest Service:
- Verde Salt Mine
- V Bar V Heritage Site
- Palatki Heritage Site
- Honanki Heritage Site.

However, prior to the establishment of the VVAC, there was limited opportunity for local residents, school children or the visiting public to participate in archaeology or see archaeological collection processing. Local collections made through professional archaeology have been curated at institutions in other parts of Arizona or in museums elsewhere in the country. The VVAC has addressed this concern and has developed an impressive number of local activities and events that have been successfully promoted regionally.

Within the Verde Valley are nine federal wilderness areas, including streams and a network of trails leading to beautiful vistas and ancient archaeological pueblos. Hiking and camping are popular. The VVAC has the opportunity to provide information and guidance for conscientiously exploring the natural and cultural resources of the area.

Camp Verde is located at the eastern end of the Verde Valley and its website: [http://visitcampverde.com](http://visitcampverde.com) provides considerable information regarding the resources available to explore, especially heritage through history (Fort Verde State Park and the Camp Verde Historical Society Museum). It also mentions archaeology (nearby Montezuma Castle National Monument, Agua Fria National Monument). However, this website only mentions VVAC once, without identifying where it is, what it offers. This should be changed!

Organizational Context

The Verde Valley Archaeology Center was an idea that started with six members of the Verde Valley chapter of the Arizona Archaeological Society (AAS). This chapter, that includes professional and avocational archaeologists, has been involved in archaeology since 1973. Members receive training and regularly work together on projects with the US Forest Service, the National Park Service, the Museum of Northern Arizona, and the Northern Arizona University. In 2009, a Native American Cultural Festival was organized and funded with $3000 from the town of Sedona.

In 2010 the VVAC was formed as a 501(c)(3) non-profit organization with proceeds from the Native American Cultural Festival and a small office/museum (650 ft²) was opened in May 2011 in a local shopping strip. About 350 people attended the opening and they knew there was strong public interest. A collection from the Yavapai-Apache Nation was then made available for display in the limited space.
In 2011, Dr. Todd Bostwick was hired to serve as the VVAC Executive Director but later restricted his duties to Director of Archaeology (projects, artifact collections, museum exhibits) and in 2012 Ken Zoll, who had been with the organization from the beginning, became Executive Director (memberships, events, office management, fund raising and grants, educational outreach).

In 2011, Members of the Camp Verde City Council approached the VVAC about permanently locating in Camp Verde. In 2012, they offered the VVAC use of the former Chamber of Commerce Visitors Center>restaurant>store building at 385 S. Main St. The Chamber of Commerce was interested in further development of the historic town center in Camp Verde and agreed to renovate with new HVAC, room remodeling, install handicap ramp, replace damaged ceiling tiles as needed and repair roof. They considered the VVAC to be a good addition to the list of adjacent downtown attractions on East Hollamon Street and other nearby shops and restaurants. The VVAC opened its doors in November 2012 and continues to conduct archaeological inventories of the valley and to document archaeological sites. They preserve archaeological collections as a repository through professional curation repository agreements or private donations. They educate and promote archaeology through museum displays, events, tours, and publications.

In 2012 a Summer Preservation Grant from the National Film Preservation Foundation (NFPF) was received by the VVAC and the Hopi Tribe to preserve a film, *Lost Ceremonies of the Hopi Cliff Dwellers* (1958) that documents the Native American troupe that helped secure federal protection of sacred Hopi dance ceremonies. The troupe of Hopi dancers performed throughout the country from the 1920's through the 1950's. The films were given to the VVAC Director by a Camp Verde resident [see http://verdenews.com/main.asp?SectionID=1&ArticleID=50606](http://verdenews.com/main.asp?SectionID=1&ArticleID=50606) The NFPF preservation grants target productions that fall under the radar of commercial preservation programs. The awards provide support to create a film preservation master and two access copies of each work. Films saved through the NFPF programs are made available to the public for on-site research and are widely exhibited through screenings, museum installations, DVDs, television broadcasts, and the Internet.

The film was showcased at the VVAC Native American Film Festival in 2013, which is an important fund raising event for the center.

In 2013 the VVAC began to work with the British Broadcasting Corporation (BBC) on the production of a film about documentary about the Hopi Dance Troupe in the film.

In 2014 the VVAC received the prestigious Arizona Governor's Archaeology Advisory Commission Award in the Private Non-Profit Entity category at the 13th Annual Arizona Statewide Historic Preservation Partnership Conference. The announcement states:
"The Verde Valley Archaeology Center's mission is to preserve archaeological sites and collections; to maintain collections locally and make them available for research and education; and to foster a deeper understanding of archaeology and American Indian history in the Verde Valley. In only four years, the Center has forged partnerships with the Town of Camp Verde and others; established a museum, library, and curation facility; created public education programs; and grown to 350 members. Its members volunteer on fieldwork, analysis, and interpretive projects in the Prescott and Coconino National Forests. In 2012, the Center hosted the Verde Valley Archaeology Conference. Public programs include lectures, site tours, film festivals, a YouTube channel, and festivals of archaeology and Native American culture. The Center also presented programs to more than 650 students at 10 schools and public libraries."

In 2014 a Conservation Assessment Grant (CAP) was awarded to VVAC by Heritage Preservation through a cooperative agreement with the Institute of Museum and Library Services (IMLS). [http://www.imls.gov/](http://www.imls.gov/)

CAP provides a general conservation assessment of a museum's collection, environmental conditions, and site. Conservation priorities are identified by professionals who spend two days on-site and three days writing a report. The report can help a museum develop strategies for improved collections care and provide a tool for long-range planning and fundraising.

In less than three years, the VVAC has become known for its excellent efforts to protect archaeological sites, conduct archaeological surveys and excavations, and produce an Occasional Paper Publications series. VVAC has discussed a Field Archaeology Certificate Program with the Dean of the Yavapai Community College and has ties with the Archaeological Conservancy. Since its opening, an impressive record of grant writing and the development of Collection Management Documents, an Archaeology Lab Manual, an Emergency Preparedness Plan, and an Archaeology Field Manual have followed.

The VVAC offers information of relevance to the Verde Valley. The mission or purpose is "to preserve archaeological sites and collections, to curate the collections locally, and to make them available to 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."

(This statement was approved in 2011).

The Verde Valley Archaeology Center may want to define its vision.

(possible suggestion: to be “the foremost research and educational institution devoted to the preservation, interpretation, and celebration of archaeology of the Verde Valley.”)

The Verde Valley Archaeology Center may want to define its values to be:

(possible suggestion: (1) We value the human adaptation to the Verde Valley and feel that both artifacts and archaeological sites should be protected and preserved as the top priority. (2) We believe that an understanding of the past is a key to developing sustainability. (3) We believe that the museum should provide a forum for the discussion of ideas about the past, present and future.)
The VY AC is open every day 10-4, except Tuesdays. A people-counter has recently been installed to record visitors who do not sign the register. Access to the Center's website, YouTube channel, and social media platforms are tracked through Google Analytics. The admission cost is free but there is a donation box. Public membership is 362 and includes the following categories and rates: of Student- $10, Supporting- $35, Contributing-$50, Sustaining-$100, Benefactor- $250, Life- $350, Patron- $500, Business Member- $250, and Business Patron-500.

The museum makes the collections available to the public through exhibitions, tours, and an outreach program to area schools. Among the museum activities offered to the public are:

- The annual Archaeology Fair, held the last weekend of March in the Camp Verde Community Center, features archaeology-themed programs and interactive activities for the whole family. Activities created and presented by archaeologists, educators and other specialists includes archaeology methods and exhibits on pottery sherd identification, lithic identification, dating methods, excavation tools and techniques, prehistoric astronomy techniques and rock art methods and meanings. The Fair also features an invitational Native American Art Show and entertainment, as well as an International Archaeology Film Festival.

- The annual Festival of American Indian Arts is held on the last weekend of September in the Camp Verde Community Center and features a large invitational Native American Art Show of over 75 artists from throughout the Southwest. The Festival also features a Native American Film Festival and a Saturday evening concert in the Camp Verde Auditorium Theater of Grammy-nominated artists on the Canyon Records label.

- The International Archaeology Day Gala, held in October to benefit the Verde Valley Archaeology Center, it celebrates archaeology and the thrill of discovery. In 2014 it will raise funds for construction of a repository/museum.

The museum does maintain a gift shop that sells a variety of items (gifts, apparel, books) related to museum mission. The shop was initially operated through an arrangement with the Arizona Natural History Association. Since March 2014, the VVAC has operated the store and has contributed $5,000 in four months that will be used to fund general operation of the museum.

**Governance**

The Verde Valley Archaeology Center is a non-profit corporation that is governed by a 14 member Board of Directors and 4 member Executive Committee that meets monthly. A Bylaws document (amended in June 2013) includes ten pages with seven appendices and identifies: Members, Directors, Officers, Salaried Employees, Advisory Council and Board of Trustees. The Standing committees include: Executive, Membership, Communications, Nominations, Education, Building, and Collections.

A discussion of objectives for the VVAC was not provided. Stated objectives can help prioritize a strategic plan and help with grant proposals. *(Possible suggestions)* for objectives for VVAC might include:
1. To promote the maintenance and expansion of The Verde Valley Archaeology Center To promote the public’s interest in archaeology and the museum
2. To promote the prevention of vandalism, pilfering of artifacts, and profiteering in any way from the sites of archaeological importance
3. To promote research pertaining to archaeology and to publish and make available the results of such research.

Support for maintenance of the physical structure comes from the Town of Camp Verde; support for collections care comes from VVAC income, grants, and donations. There is a regular line item specifically for preservation of the collections ($500 annually) including: security, collections management and care, repairs, and cleaning.

Suggested Priorities:

1. A reconstructed summary of VVAC history relevant to preservation could be important in establishing a long record of commitment to collections care. A list of historic events that have affected the building, collections, and staff is a useful tool for fundraising, grant writing, and press releases. It indicates the high level of skill and professionalism within the institution.

2. As the museum embarks on exhibition development and greater educational programing, the vision statement might include something that shows that the VVAC strives to create an engaging destination in the Verde Valley that celebrates human interaction with the land through preservation of collections, research and education, and memorable events and experiences.

An internet blog that provides an interesting discussion about museum vision statements can be found at: http://museumnotes.blogspot.com/2010/12

3. Carefully consider placement of kitchen and food areas in the Schematic Concept for a new center and place these activities far from collection storage, management and exhibition.

4. In addition to adopting the bylaws, it is recommended that the Board of Directors adopt a code of conduct and review ethics of museum boards, identify conflicts of interest, and consider adding standing committees for Building & Grounds (for new center) and Events.

5. The VVAC may want to consider becoming a Blue Star Museum and offer programing to active military personnel and veterans. http://arts.gov/national/blue-star-museums

6. The VVAC may want to consider completing the development of five recognized critical documents (including the mission statement; Institutional Code of Ethics; Strategic Institutional Plan, Disaster Preparedness, and Collections management Policy) by considering the AAM Core Document Review Process. See details at http://www.aam-us.org/resources/assessment-programs/peer-review/peer-review-newsletter/introducing-the-core-documents

7. The VVAC may want to consider working with the American Association for State and Local History (AASLH) StEPs program- StEPs guides even the smallest museums and sites in assessing policies and practices and pointing the way toward a much stronger and vibrant community anchor. And that translates into more support, more credibility and an organization that will be a valuable asset to its community for many more years to come. http://tools.aaslh.org/steps/
8. Relevant professional organizations to know about include:

   American Alliance of Museums
   Books, resources
   www.aam-us.org

   American Rock Art Research Association
   Information on recording, education programs, etc.

   American Association of State and Local History
   Books, resources, awards for books, posters, etc
   www.aaslh.org

   Balboa Art Conservation Center
   Information on workshops, surveys, and resources.
   http://www.baacc.org

   Museum Association of Arizona
   http://www.azmuseums.org/

II. STAFF

The VVAC has a small but dedicated staff. Fourteen Board members and about 30 volunteers work under the direction of the Director of Archaeology (paid) to oversee (assigned volunteer) positions of Collections Manager-Collections Supervisor-Curation Staff; Museum Displays and Exhibits; Artifact Management; Archaeological Project Manager-Field Manager; the Laboratory Manager-and Analysis staff. An Executive Director supervises part-time positions of Administrative Assistant (paid) and Data Manager (assigned volunteer). The underlined positions have position descriptions that were provided for this review. While the VVAC has a Preservation Policy (May 17, 2014) the position descriptions fail to identify any support for preservation or mention the Preservation Policy.

Executive Director (currently Mr. Kenneth Zoll): holds a graduate degree in business and previously worked in Chicago with the US Railroad Retirement Board and also served in 1989-90 as Executive Director of a Presidential Advisory Commission in Washington D.C. From 2006-2010 he served as President of the Verde Valley Chapter of the Arizona Archaeological Society and from 2010-2013 as Treasurer of the Verde Valley Archaeology Center. He is the author of several books on Archaeoastronomy in the American Southwest.

The Executive Director acts as the operations manager; director of programming; liaison to the Board; and manager of communications, marketing and fund raising. In addition, the Executive Director edits the center’s quarterly newsletter and represents the center before community organizations, school systems, tribal organizations and other archaeological organizations and museums. The position requires education, experience, multi-tasking and self-starter ability, computer skills. The position description does identify responsibility for security in item 12 and item 14 includes establishes and supervises of policies and practices of the Center to ensure compliance with all laws, and the highest standards for cultural resource management curation of all cultural materials in possession of the Center. Preservation responsibilities are not specifically mentioned. Suggested responsibilities might include:
• Assures the **preservation** and protection of museum collections through maintenance of the facilities and equipment; staff training; visitor safety; building security; and disaster planning.
• Subscribes to the Code of Ethics for Museum Directors and Museum Shops by the AAM
• Subscribes to the relevant laws and acts for the protection of archaeological resources and Native American artifacts.

**Administrative Assistant** (currently Ann Rasor): This part-time position covers reception duties, gift shop, and overall assistant for programs and events. The Position description does not identify Preservation. Office staff positions might include: Overall awareness, concern, and commitment to the preservation and security of the collections.

**Director of Archaeology** (currently Dr. Todd Bostwick): Holds graduate degrees in anthropology and history from Arizona State University and had a career as the City of Phoenix Archaeologist at the Pueblo Grande Museum in Phoenix. His research interests include rock art, archaeoastronomy, ideology, craft production, and ruins stabilization.

The position reports to the Board of Directors. The job description identifies related responsibilities in item (1) as **plan, implement and supervise all field, lab and curation operations**. **Suggested responsibilities** might include:

• Implements museum professional practices matching national standards and VVAC policies in regards to artifact acquisition, de-accessioning, **preservation**, research, interpretation, and presentation.
• Subscribes to the Code of Ethics for Curators by the AAM
• Subscribe to the relevant laws and acts for the protection of archaeological resources and Native American artifacts.
• Subscribe to the Society of American Archaeologists (SAA) Principles of Archaeological Ethics

**Collections Staff** (currently many volunteers) These positions report to the Director of Archaeology. They should have position descriptions that indicate what they do. These positions have responsibilities that may include:

• Implements registration and **preservation** of artifacts, implements of artifact storage solutions and catalog records.
• Subscribes to the AAM standards and Best Practices
• Subscribes to the Code of Ethics for Curators by the AAM
• Subscribes to the relevant laws and acts for the protection of archaeological resources and Native American artifacts.
• Subscribes to the Society of American Archaeologists (SAA) Principles of Archaeological Ethics

**Volunteers, Part-time**: The position reports to Executive Director or the Director of Archaeology and assists with duties for day-to-day operations. Responsibilities might include a general awareness of the importance of museum housekeeping, security and **preservation** in description...
and orientation for this position. Also, an overall awareness, concern, and commitment to the preservation and security of the collections.

**Suggested Priorities:**

1. Professionalism in the activities of the museum staff is very evident, despite the fact that most of the staff is small and avocational. The Orientation Procedures are great but should include a mention of mission, ethical conduct and overall concern for preservation of the collections.

2. Preservation responsibilities and evidence of ethical practice for each staff member would be helpful in grant proposals, repository contracts, and consultations. For example it should be stated in position descriptions that all staff members promote the mission of the museum and preservation of the collections. The Executive Director position provides leadership by fostering the mission of the Museum and is ultimately responsible for the preservation of the collections through supervision of building maintenance, museum events, and the emergency plan. The Director of Archaeology serves as head of curation and curators are typically responsible for the preservation of the collections by providing professional standards for management, research, storage and preservation of the collections as they relate to processing, handling, exhibit preparation and environmental needs. Volunteers and office staff typically acknowledge and respect the role of preservation in all programming at the museum.

3. Volunteers, interns, docents, and board members serving on committees should have position descriptions with clarity regarding to whom their position reports to. Preservation responsibilities: not specifically stated but general awareness of the importance of museum housekeeping, security and preservation should be encouraged in description and orientation for these positions.

5. The VVAC does encourage staff training and professional development, but this is not indicated in the position descriptions. It is recommended that all staff be encouraged to participate in training or professional development activities. When available, funding to attend workshops, courses, webinars should be sought to continue the momentum. As part of the Center’s library there is a small collection of museum reference materials exists and additions are encouraged.

6. Museum related Codes of Ethics should be reviewed and supported by museum staff, see: [http://www.aam-us.org/resources/ethics-standards-and-best-practices/ethics](http://www.aam-us.org/resources/ethics-standards-and-best-practices/ethics)
   [https://aamd.org/about/code-of-ethics](https://aamd.org/about/code-of-ethics)
   [http://www.aam-us.org/docs/continuum/courcemactics.pdf?sfvrsn=0](http://www.aam-us.org/docs/continuum/courcemactics.pdf?sfvrsn=0)

III. GENERAL BUILDING

The VVAC facility includes one 3,336 sq. ft. building built in 1985 that is owned by the town of Camp Verde and leased to the VVAC. The VVAC considers it to be a temporary location as they are actively planning for a larger facility.

The building construction can be described as a single level, wood and stucco with a metal roof on wood rafters, and concrete floor. It was originally built to be a restaurant. Museum use of the building is consistent with the center’s mission. The building has been modified to address three types of activities. One quarter is used for Collections Office, Research Lab/Library, Collections Storage, and Supplemental Storage. A middle half of the building space is used primarily for Exhibits, Children’s Archaeology Adventure Area, Administration Offices, Gift Shop, and Rest Room. Another quarter is used for a Learning Center multi-purpose room, a Kitchen, Rest Room and Supplies Locker. Special events take place in the museum, often in the Learning Center, and food preparation and use occurs in that quarter which can be fully separated from exhibits and collections processing/storage.

Operable doors for the public are at the entrance, one door at the back serves as an entrance to the Learning Center; and another serves as a Parking lot entrance and secondary emergency exit from the gallery as well entrance to the Supplemental Storage room.
All maintenance and repairs to the building are arranged and covered by Camp Verde contractors through the City. Landscaping is minimal and low maintenance.

Windows: front office and foyer Landscape/gutter Utility service on back

Front door Supplemental Storage Exhibit space

**Suggested Priorities:**

1. The overall condition of the museum building is impressively good.
2. Regular review of the building exterior is appropriate for addressing preservation/protection issues for the collections inside.
3. Utilize what has been learned from the current building when planning the future Center.

**IV. CLIMATE CONTROL & ENVIRONMENT AFFECTING THE COLLECTIONS**

Preventive Conservation includes a concern for the total museum environment and how it impacts the collections. Sources of environmental risk to the collections include temperature, relative humidity, pollutants and particulates, illumination or light levels, and pest control. The museum is poised to address all of these topics and must be if they are to be in compliance for curation of federal collections.

Specifically relevant to institutions that wish be repositories for federal collections is the Code of Federal Regulations (CFR), title 36, chapter 1 part 79 --Curation of Federally-Owned and Administered Archeological Collections; Authority: 16 U.S.C. 470aa-mm, 16 U.S.C. 470 et seq.s
79.8-- Terms and conditions to include in contracts, memoranda and agreements for curatorial services (5)(ii) indicates that the facility will protect the collections from breakage and possible deterioration from adverse temperature and relative humidity, visible light, ultraviolet radiation, dust, soot, gases, mold, fungus, insects, rodents and general neglect. The VVAC has achieved conditions in its building that are vastly superior to many repositories and small museums.

On-site readings were made with instruments brought from the Arizona State Museum-University of Arizona. Desired levels for temperature and relative humidity should be similar to human comfort and avoid extreme daily fluctuations. Levels for ultraviolet light radiation (UV) should be lower than 75 microwatts per lumen (µw/ lm) of UV with sensitive collections. Foot Candle levels of luminance should be <5 FC for textiles, photographs, and organic materials; <10 for wood and un-dyed organics; <30 for other materials. The Infrared (IR) heat readings were taken to provide an idea of the different wall temperatures within the museum.

Devices used included:

- Blue Wool Fade Card (available from Talas)
- General hydro-thermometer
- General Lux-Foot Candle digital meter
- Crawford UV meter
- Minolta Cyclops IR instrument

Late June in Arizona is usually extremely hot, sunny, and dry. In fact, July is on average the warmest month of the year, August has the highest average precipitation, and December is on average the coolest month.

Examples of environmental data during the on-site survey (June 24-25 @ various times):

<table>
<thead>
<tr>
<th>Area</th>
<th>PM °F/RH%</th>
<th>AM °F/RH%</th>
<th>FC</th>
<th>UVµ/lu.</th>
<th>IR°C Walls EX/IN</th>
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<tbody>
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<td>Learning Ce</td>
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<td>44</td>
<td>180</td>
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<td>Kitchen</td>
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<td>Exhibit Gallery</td>
<td>x 74-77/19</td>
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<td>42</td>
<td>410</td>
<td>75/73</td>
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<td>Research Lab</td>
<td>x 80/20</td>
<td>x 75/22</td>
<td>66</td>
<td>150</td>
<td>87/80 PM-78/78AM</td>
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<tr>
<td>Storage</td>
<td>x 82/19</td>
<td>x 76/21</td>
<td>28</td>
<td>150</td>
<td>79/79 PM-77/78AM</td>
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<td>Supplemental St.</td>
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<td>5</td>
<td>500</td>
<td>91/84 PM-87/83AM</td>
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</table>
4.1 TEMPERATURE AND RELATIVE HUMIDITY


The town receives about 8-9 inches of rain per year. Annual average monthly temperatures range up to 97.6°F in summer and as low as 30.7°F in winter. During the on-site visit days, the average indoor temperature was 78°F PM and 75°F AM and the average relative humidity was 19% PM and 20% AM.

The VVAC building has a Trane mechanical Heating Ventilation and Air Conditioning (HVAC) system. The system includes 2 separate units, zoned for the Learning Center and for the Museum that maintained 24 hours/day. Local and portable climate control equipment is not used and windows/doors are not opened for ventilation. The units were installed in 2012 and are maintained by the town of Camp Verde.

The building is served by two roof mounted HVAC units that were newly installed in 2012. Thermostats are checked by staff who indicated that the systems provide consistent climate control.

During the on-site visit days, the average indoor temperature was 78°F PM and 75°F AM (set for 76°F) and the average relative humidity was 19% PM and 20% AM (no humidistat is on system). Recorded local weather readings for June 25, 2014 in the Verde Valley (Sedona Airport) indicates a daily high temperature of 91°F and low of 66°F, the average was 80°F. During the on-site visit the low relative humidity and stronger winds created critical fire weather conditions.
The VVAC received several hygrometers and thermo-hygrometers from the Museum of Northern Arizona but have been concerned about their reliability and where they should be used. During the on-site visit it was obvious that many of these may not have been working well.

**Suggested Priorities:**

1. The VVAC is located in the temperate Verde Valley. Collections from the arid southwest are known to be some of the oldest preserved items that document the human record in the Americas. While the archaeological collections are mostly ceramic, stone and lithic in nature, there are additionally items made of organic material, related archival collections, as well as ethnographic objects. I recommend that the temperature be set to human comfort and that relative humidity be set to 30-35% with allowance for seasonal drift.

2. The present mechanical system is designed to be effective for human comfort as well as provide a good environment for the collections in the VVAC building. I do not think that a humidification system is necessary. Maintenance and repair activities for the HVAC units should be recorded based on a schedule identified in the Preservation Plan. This includes the filters, which should be dated when installed.

3. Environmental Hobo Data nodes can be downloaded to a computer on a schedule and may provide useful information for grant applications and mechanical systems maintenance. These systems can be very useful and should be part of the future Center planning. The observations regarding the hygro-thermometers should indicate that regular calibration of these instruments is necessary. Follow these instructions:

   When several monitoring units are used, check for calibration periodically; consider pulling them together to see if they are reading nearly the same. Give each unit a number or name with date of installation. If a particular unit is not reading similar to the other, consider placing it in a container with a wet sponge (not touching—just sharing air) and see if you can get it to read 100% RH, then remove it and place near another unit to see if they then read the same.

4. Consider purchase of a **psychrometer** or hydro-thermometer to spot check the museum environment and keep a log to learn to recognize seasonal drifts, problems, etc.

**4.2 Pollutants and Particulates**

The VVAC location in Camp Verde does include some gritty particulates that are ubiquitous to the Southwest. The EPA measures five pollutants to judge air quality, including ground-level ozone, particle pollution (also known as particulate matter), carbon monoxide, sulfur dioxide, and nitrogen dioxide. Air quality is measured on a ratings value scale index of 0 to 500. Any measurement over 151 is considered unhealthy for most people. Particulate matter (PM) is a complex mixture of solid and liquid particles suspended in air that vary in size and composition. Sources of PM include dust, biologic material (pollen and spores), combustion sources such as forest fires, heating furnaces, power plants, factories and internal combustion engines (cars,
trucks, buses, ships, trains, and construction equipment). The VVAC HVAC unit filters are checked and changed every six months.

Levels of pollution in Camp Verde are comparatively lower than the State of Arizona and United States averages indicating the Air Quality is good. However, the forests in the Verde Valley are subject to wildfires in the summer months that can create a lot of smoke.

**2010 Pollution Indexes**

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<th>90</th>
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<td>Nitrogen Dioxide</td>
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Index score: (100 = National Average) for an area is compared to the national average of 100.

Over the past year, much work has been done to curate new archaeological collections and create the archives collections. Storage conditions for much of the collection were improved with archival storage boxes, folders and papers.
Suggested Priorities:

1. Staff members should document the size and capacity of the HVAC filters and mark them with an installation date. Notes of the scheduled change and condition of filters when they are changed should be part of a Preservation Plan.

2. Products selected for re-housing or storage of collections use should meet standard curatorial specifications. Maintain the use of acid-free storage materials. An Archivists pen is helpful in selecting paper based folders, papers and supports and these products should be tested as soon as an order comes in.

4.3 ILLUMINATION

Fluorescent ceiling lights, Track lighting

Utilitech Pro Slim LED light bar Exhibition gallery fluorescent lights

Museum lighting is a topic that should receive additional attention during planning of the Future Center and there are good resource materials available. For example, lighting is measured in illuminance (levels of foot candles or lux), infrared (heat), ultraviolet (damaging UV), and color rendering (temperature). In the present facility, the only source of natural daylight is at the front door/foyer entrance and the windows to the Children’s Archaeology Adventure Area, Administrative Office and Research lab. The VVAC has fluorescent lights throughout the building including the exhibit areas, offices, and storage rooms. Most have diffuser covers offer some UV protection but basically no illuminance (lux or foot candle levels) protection. Tungsten halogen and LED lights are also used in in the exhibition area. The VVAC does not
have a monitor for light levels. Lights are used during opening hours. Non-flash photography by visitors is permitted.

**Suggested Priorities:**

1. If they fit, the VVAC should consider using UV absorbing sleeves for the fluorescent bulbs that were brought from Tucson.

2. The museum should consider purchase of a UV light meter for monitoring. It is possible to use a photographer's light meter or even an old film camera for determining light levels (CCI Notes has information on this). Light levels may also be checked continuously with some data logger models.

3. Visitor activated Exhibition lights should be considered in the Future Center exhibit planning designs, particularly those with organic items.

4. The VVAC Preservation Plan should discuss lighting under the Environmental Management Section. It would be useful to indicate what types of bulbs are used in the museum (note the color, size, watt, etc.) and where they are purchased from. If UV protecting sleeves are used, consider putting an installation date on them. It is also possible to limit exposure for sensitive items or diminish lighting in the fluorescent lights by inserting a piece of shade cloth between the bulb and the diffuser panel—this was discussed with regard to the Tuzigoot cases and with the Yavapai-Apache Nation objects on the upper glass shelf.

5. A lighting policy for the entire Museum section of the Center would identify (1) if windows have UV protective film (meter readings suggest they don't), (2) which fluorescent lights have diffusers or UV protective sleeves, and (3) what types of flood, halogen or LED bulbs are being used in exhibit areas by their color temperature, brand name, and installation date. Details about how they are monitored and purchased and how often they are changed will help maintain consistency and protection for the collections.

**4.3 INTEGRATED PEST MANAGEMENT**

The VVAC has established an Integrated Pest Management (IPM) plan which is the preferred strategy for managing insects and rodents in library, archive, and museum collections. Implementing an IPM program involves the commitment of all facilities personnel, including staff and volunteers. An IPM approach uses ongoing monitoring of insect populations to determine the nature and extent of infestation; a tightly contained program of extermination (e.g., exterior building spraying, localized use of fumigants, freezing, anoxia); and ongoing control of the building environment, especially at the interface between collections areas and the external landscape. The factors that enable the pests to survive and reproduce can then be controlled.

The VVAC staff members indicate that they have not had pest problems. The interior of VVAC building is not under a commercial Pest Control Contract however, the Town has a contract for the exterior of the building. The CAP Questionnaire form indicates that termite damage to the exterior of the building required maintenance.
The VVAC IPM plan which was reviewed with its accompanying recording forms. As an important part of a museum's Preservation Plan, it is particularly useful for all areas with collections or near collections. Freezing is used at VVAC as a preventive and treatment measure to mitigate infestations. Procedures for wrapping objects (particularly fragile organics), and duration were discussed. Items are wisely frozen and unpacked in the Learning Center area prior to documentation in the Research Lab.

Suggested Priorities:

1. The freezing technique for pest eradication is an efficient and inexpensive way to manage a pest infestation in most materials. A history or log of insect/pest issues should be made to record problems as well as record any treatment. I like to recommend placing items in plastic bags prior to bringing them into the museum freezer; remove as much air as possible from the bag; place bags loosely into the freezer and go 48 hours in- 24 hours out- 48 hours in, leave bagged item closed until they reach room temperature. The use of cotton cloth is not necessary and may cause additional damage to fragile artifacts. All items should be vacuumed (a HEPA vacuum is desirable but not critical) and if there is a vacuum bag- it should be disposed of immediately after use (outside the building).

2. When chemical pesticides are used on or in the building, to adjacent plantings or other areas, a record should be made and filed. Any current or past Pest Control contracts with the Town of Camp Verde should be reviewed. Copies of Material Safety Data Sheets (MSDS) for any chemicals used and date or schedule of use should be filed.

3. The Sticky-Traps are a good idea and staff do inspect them on a bi-monthly basis and change them a couple of times a year depending on insect count. A critical detail is to determine if there is a seasonal pattern for the types of insects. It is necessary to look them up and learn about them to determine what their lifestyle is like and how this can impact the collections. A Museum Pest website: http://www.museumpests.net/identification.asp is particularly useful. The University of Arizona has an extension service that might be a resource if difficult-to-identify pests are found, especially around exterior doors.

4.5 HOUSEKEEPING
The VVAC is an impressively well maintained and clean facility. All maintenance of the interior including lighting, plumbing, painting, and floor cleaning are the responsibility of the VVAC staff. Food storage and preparation is confined to the kitchen which is in the Learning Center area of the building. Staff members are also responsible for removing rubbish away from all areas of the VVAC.

The potential for hazardous off-gassing by storage, exhibition, custodial or maintenance materials can be controlled by curatorial review of products and materials used with collection objects in exhibition and storage.

Suggested Priorities:

1. The VVAC should add a Policy on Food, Drinks, Live Plants and Cut Flowers to protect the collections from infestation. This could be an appendix in the Preservation Plan. Also, an events log indicating when food, drink, cut flowers are allowed and what protocols for trash pick-up are involved should be started as part of the Preservation Plan.

2. All supplies from the custodial closet should have an inventory and Material Safety Data Sheets (MSDS) should be obtained. These items can become part of the Housekeeping Plan of the Preservation Plan.

V. COLLECTIONS AND COLLECTION POLICIES

The VVAC has completed a great deal of work regarding management of its collections. Information on the collections is identified in the CAP Questionnaire which identifies 27% of the collection to be owned by VVAC through donation (specifically the Goddard Family, the Simonton Family, and Dyck Family). The remainder is legally owned by the Yavapai-Apache Nation and the US Forest Service.

5.1 COLLECTIONS PROFILE

The VVAC’s mission refers to preserve archaeological sites and collections. This statement provides rather vague reference to the collection’s profile. The CAP Questionnaire indicates the VVAC priority collections consist of:
- Archaeological artifacts, 100-500 ceramic sherds, 100-500 stone items, 500-1000 library/archival documents (representing the Verde Valley Native American Archaeological sites?).
- 1-20 ceramic whole vessels (representing local and regional archaeological?) as well as historic Native American pieces.
- 20-100 organic perishable specimens (from the region?).

The archives collection documents regional archaeological work and includes aerial photographs, photographic materials, documents, oral histories and other records that document natural features, archaeology methods, ethnographic history and private collections donated to or curated by the VACC.

**Suggested Priorities:**

1. A good narrative description of the collections can be useful in grant proposals to provide compelling confirmation for the value of the collection for research. Collections might also contain study collections or educational collections. A distinction is usually made that affects how they are cataloged, stored, labeled, and used.

**5.3 COLLECTION POLICY**

Museums that own and manage collections should have documentation that covers a wide range of transactions: Acquisitions/Accessioning; Deaccessioning/disposal of collections/use of proceeds from the sale of deaccessioned collections; Loans, incoming and outgoing; Collections care; Inventories; Access and/or use of collections. It was clear in the on-site visit that the VVAC is aware of the importance of Collection Documents and policy and procedure for the management of collections. They have adapted a template system that provides an efficient but somewhat generic approach to Collections Management. As the collection grows VVAC may need to be more specific regarding the category collections fit into such as, Permanent, Education, Repository, or Comparative.
VVAC has developed an impressive cataloging program to curate archaeological collections utilizing the *Past Perfect®* Information Management System. Significant attention has been focused on the processing of new archaeological collections and a draft manual with detailed procedures is underway. The Crow Canyon Archaeological Center Laboratory Manual, Version 1 (May 2000) has been used to develop procedures for analyzing types of artifacts.

It is estimated of the permanent collection: 100% has been inventoried, 100% cataloged, and 95% photographed (Tiff format). The record keeping system is both computerized and manual. The collections management documentation receives a Norton® on-line backup and hourly backup to a hard drive, and once a week, the server is backed up onto a thumb drive which with hard copies is taken to the local National Bank of Arizona for free secure storage. Collections staff and trained curation volunteers have access to the computerized records. None of the collection is available on-line.

Templates from the *Past Perfect®* program have been used to generate a range of forms including Catalog Cards (which have entry lines for conservation, maintenance and housed); Temporary Custody Receipt; and Loan Forms. The Pueblo Grande Museum Collections Management Manual has also served as a guide.

Museum policies for collection use, as identified on the website include:

**Photography:** Still photography is permitted for private, noncommercial use only.

**Sketching and copying:** only pencil sketching of items in the display cases is permitted.

Best practices in collections management include procedures and **POLICIES.** They should be customized and integrated with the forms in order to be mutually effective. Policies support the mission and operations and guide decision-making. Many of the generic policy documents were provided on a CD and are useful. More unique documents such as: Curation Contract for Long Term Repository Collections will be important to VVAC. In general, suggested written statements or specific Policy for Collections Management Activities that could be customized and expanded include all of the following:

- Mission, Vision and History
- Statement of Authority
- Code of Ethics
- Scope of Collections
Categories of Collections
Acquisitions/Accessioning
Deaccessioning/Disposal
Loans
Objects in Custody
Conservation/Care
Insurance and Risk Management
Documentation, Collections Records and Inventories
Access
Appraisals
Legal and Ethical Considerations
Intellectual Property
Review/Revision

Suggested Priorities:

1. An Acquisition Policy (Collections Plan) should clearly identify a scope of collections with a mandate regarding preservation. There are many models available but there is a good discussion for many types of collections found at: http://www.parks.ca.gov/pages/22491/files/guidelines_for_writing_scope_of_collections_statement_state_parks_ahm_march_2009.pdf


3. Best practices in Collections Stewardship is an important topic and a good reference is: http://www.aam-us.org/resources/ethics-standards-and-best-practices/collections-stewardship

4. Ideally, accession files should be duplicated and permanent hard copy records should be stored in fireproof cabinets.

5. The Yavapai-Apache Nation objects that are on “Permanent Loan” and are placed on exhibit should be converted to a regular loan that gets renewed or to a gift. This process was underway during on-site visit.

6. The Preservation Plan includes discussion for storage and handling. Policy for access to collections and use of collections is recommended based on their category as Permanent, Education, Repository or Comparative. Indicate in this plan that the museum may dispose of items that are deemed too damaged to be useful as specified in the Accessions Policy.

7. As a reminder, any objects with rodent excrement should be reviewed for human health hazard. When working with objects from the storage container compound, personal protective equipment should be used.
5.3 CONSERVATION AND COLLECTIONS CARE

VVAC is aware of the requirements in 36 CFR Part 79 – Curation of Federally-Owned and Administered Archaeological Collections. Over the past two years, the VVAC has developed good collections management procedures and accountability for its collections.

It is clear that some of the donors did not always make collections care a high priority and re-housing is needed. Re-housing the archaeological collections involves the use of archival quality materials and upgraded storage techniques. Most objects brought in in bags and boxes; a few larger or heavier items placed loose on the shelves. During processing they are placed in tissue paper on shelves. After processing they are placed in tray drawers in donated cabinets. Most staff members have received training in Collections Care methods and theory from the US Forest Service, Museum of Northern Arizona, and through other workshops.

Conservation treatments should not be undertaken in-house unless a staff member has specific training and knowledge relating to the type of damage and the necessary conservation treatment. Many of the whole vessel ceramics were cleaned, reassembled, and restored prior to receipt at the VVAC. It appears that previous repairs were not documented.

Ceramic vessels with excess plaster-of-Paris fills

Suggested Priorities:

1. It is important to preserve any indigenous repair methods.

2. Conservation treatment on objects like the ceramic vessels should be conserved under the guidance of a conservator with knowledge and experience with the ceramics of the region.

3. Use a glossary of conservation condition terms in the Past Perfect condition statement. Consider identifying if the item is stable structurally or not, if the surface is stable or not, and what is needed (cleaning, mending, consolidation, specialized storage support, examination by a conservator).
VI. STORAGE

All museum collections require storage that is appropriate to its category, material composition, and risk (i.e. security, liability, health hazard). The CAP questionnaire indicates that 312 ft$^2$ is allocated for storage in the museum building. The primary storage room is interior with two locking doors, one leads to the research room and one leads to the secondary storage room that has an exterior door. Planning for the future center should avoid multiple doors to storage or to the exterior.

The Code of Federal Regulations (CFR), title 36, chapter I part 79 --Curation of Federally-Owned and Administered Archeological Collections; Authority: 16 U.S.C. 470aa-mm, 16 U.S.C. 470 et seq.s. 79.9 Standards to determine when a repository possesses the capability to provide adequate long-term curatorial services require that the institution (2) Dedicate the requisite facilities, equipment and space in the physical plant to properly store, study and conserve the collection. (3) Keep the collection under physically secure conditions within storage by: (i) Having the physical plant meet local electrical, fire, building, health and safety codes.

The efforts to curate the archaeological collections that have been housed previously in various storage containers are exemplary. For example, the conditions within the containers of the Dyck Collection are completely opposite to the conditions called for in the Code of Federal Regulations (CFR), title 36, chapter I part 79. The VVAC staff members are rescuing these collections from containers that were infested, moldy, dirty, and endured highly fluctuating temperatures over time. Overall, the VVAC use of steel shelving, archival boxes, and acid free tissue paper indicate a professional approach to storage.

The room is clean, secure and orderly. The shelves are labeled with storage locations and are padded with expanded polyethylene foam. The steel and wood shelves have served well but are inefficient and not secure. The progress to inventory and professionally store the archaeological collection is extremely impressive. Overall, the current storage system is a little awkward and inadequate. More space is already needed but the space is lost to the single shelf layout of finds. Design for a future Center should consider overall space use, future collection growth, security, and climate control concerns. Several ideas were discussed during the on-site visit.

- Consider a cord across the front of the shelves that have pottery vessels to prevent falling.
- Consider wire rack shelves on wheels for collections so they can be compressed in the small room and moved when needed.
- Consider clear or semi-clear plastic containers that can be stacked for small finds.
- The VVAC could activate an account with Gaylord which offers discounts to museums with membership in the Museum Association of Arizona.

![Image of wire rack shelves on wheels]

- Avoid shelves less than 4" above the floor.
- Avoid the foam that has ripples.
- Avoid acidic boxes except for stone tool and ceramic sherds.
- Consider using a thick mill plastic zip-locking bag with number sealed on one edge. Most bagged items could be aligned in a box for easy access. Very fragile items to unstable for this should be stored flat.
- Consider getting a plastic sealer, they come in a variety of types including old-fashioned seal-a-meal appliances to specialized floor models. Packaging Aids handheld sealers have been useful [http://www.pacmachinerygroup.com/mtype.php?id=1](http://www.pacmachinerygroup.com/mtype.php?id=1)
- Consider NOT using the wood trays in old metal Quarter-Unit cabinet method.

![Image of plastic zip-locking bags]

- Consider an exterior label with date that is visible.
• Consider Rubbermaid or other plastic bin that can stack for ground stone.
• Alternately, trays or shallow bins (like those used in auto parts stores) with polyethylene foam liners could be appropriate for bagged ground stone items.
• Avoid storage of educational collections with other collections

Unprocessed Dyck Collection  Wood box  Bagged items in box

• Dyck collection is wisely stored in the Learning Center prior to processing; avoid using the cotton cloth wrap in freezing process for organics.
• Consider a plastic label pouch on the outside of larger boxes to avoid taping.

Transfer cart  Organic material housing  Folded textile

• Padded cart is good.
• Fragile items might benefit from the use of Reemay® (non-woven spun bonded polyester fabric) or the use of a closed-cell polyethylene foam such as Volara®. A sheet of this could be placed into a plastic bag with the artifact to provide added structure and firmness while allowing the item to be seen without unwrapping.

Suggested Priorities:

1. A thorough study of space and design in the storage room is needed to address the best organization of space. A larger overview of all the collection management activities including library-archives-photos collection work, and future data management activities should be considered in design of a new center.
2. A small range of movable wire shelving racks and better use of floor plan would be useful. For example:
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http://www.globalindustrial.com/g/storage/wire-shelving/chrome/nexel-chrome-wire-shelving

3. Purchase a plastic bag sealer and HEPA vacuum for storage rehousing projects.

VII. EXHIBITIONS

Exhibits allow museums to interpret the objects in their collection while working across a range of media. The VVAC has an open gallery space (the entire exhibition area is 379 ft²) in the middle of the building that allows for several exhibit cases. The VVAC has created a sub-area as a Children’s Archaeology Adventure Area near the main entrance. Five exhibit cases of historic Civilian Conservation Corps, made for the Tuzigoot National Monument (also in the Verde Valley) that became available after renovations there, are loaned to the VVAC. Other display cases have been obtained as donations and are also considered a short term solution. Exhibition case spaces are provided to the Yavapai-Apache tribe to present various archaeology and ethnology objects for educational interpretation. The objects are on permanent loan to the VVAC. Other objects on display are donated gifts and are owned by the VVAC. The displays are nicely organized.
VVAC has been recognized for its regular use of artifacts in a wide range of community programming that includes demonstrations and makes them available for research purposes, and with tours, lectures and films, outreach programs to schools and other groups, and school groups at the museum. They are doing exceptional work in this area.

Educational programming inside the VVAC is also highly successful. The viewing window to the Research Lab from the exhibits gallery is nice. Hanging posters could be used to provide interpretation of the activities or objects. Behind-the-scenes viewing areas are always very popular with visitors and they help staff maintain order and cleanliness of the workspace.

The VVAC has begun planning a new exhibit area for some of the perishable collection pieces. The VVAC utilizes the learning center for exhibit preparation where there are large tables. The area has adjacency to the exhibition gallery and the entrance from the back parking lot.

In addition, there is the plan for a Future Center with the goal of being a larger regionally-focused museum. The CAP Site Questionnaire Information Form indicates that 21% of the collection is on exhibition. However, new collections are in development.

During the site visit there was discussion about several aspects related to exhibition:
  - The pros and cons of keeping the overhead fluorescent lights on with the case spot lights.
  - Ideas for displaying textiles; corner, maybe darkened cave-like niches to highlight them.
Suggested Priorities:

1. A general statement for use of collections on exhibition is included in the Preservation Plan but there could be consideration that depends on what category of collection is being used; the exhibit installation procedures; the exhibit cleaning schedule and methods; and the procedures for incoming loan materials.

2. When considering future exhibitions and the possible use of loans or travelling exhibits in the proposed larger center it may be useful to review the General Facility Report—April 28, 2008 by AAM Registrars Committee. This report includes an institution’s physical specifications and staff practices. The standard for is widely used among institutions but is also a useful self-assessment tool for planning a building and its security.

3. Products to create, clean, and maintain the exhibits that are used by the staff should be listed in the Preservation Plan (with MSDS information) and be reviewed. Safe disposal procedures should be used to discard old products.

4. All Collection items used in a display should be part of an exhibit inventory; careful identification of the collection category system will allow the Staff and Board of Directors more flexibility in the use and de-accession of replicas, procedures dealing with damaged objects, and replacement if better quality items are received.

5. Consider the use of micro-climate sealed exhibition cases in the new permanent exhibition.

6. It may be useful to consider the use of QR (Quick Response) codes in exhibitions and interpretation of maps or landscape in the Future Center.

VIII. EMERGENCY PREPAREDNESS AND SECURITY

The location and weather conditions for the VVAC present few potential sources for disasters. The CAP questionnaire identifies Monsoon Rains and Lighting Strikes, which usually occur together. The USGS database indicates there is a 23.3% chance of a major earthquake within 50 miles of Sedona within the next 50 years.

The Executive Director has attended a workshop for Emergency Planning led by the Arizona State Library and Archives. The VVAC has developed a draft Emergency Preparedness Plan based on the online disaster-planning template offered by the Northeast Document Conservation Center and the Massachusetts Board of Library Commissioners (updated 6/20/2014).

There is a First Aid Kit and Basic instructions for emergencies are written, printed and posted. An Incident Information Form has been developed to report events such as (interior floods, leaks, power outages, etc.). A Disaster Kit of response supplies has been created and is ready for use.
The closest Fire Department is located to the south on South Access Road, less than a mile from the VVAC. The Fire Marshall is familiar with the VVAC building. Fire extinguishers are located in the building and are inspected regularly. Emergency Exit routes are posted with lighted signs above the doors. The VVAC has automated fire detection for smoke or heat an audible automated fire alarm in the building. The closest hospital is in the town of Cottonwood.

Security for the VVAC building is a zoned system that includes locking doors, alarm sensors for door and window contacts, and motion detectors throughout the building. The building exterior has safety lighting. There are no case alarms, glass breakage detection or closed circuit television surveillance. Only select staff members (about eight) staff have codes for the keypad entrance, key card, alarm codes, and they undergo security training. The alarms are tested about 4 times per year and a log is provided by Detectronics of California and Rimrock Service.
The Camp Verde Police Department is located to the north off of Montezuma Castle HWY, less than a mile from VVAC. Due to the Main Street address, Police officers drive by the VVAC building on a regular schedule. One act of vandalism, (graffiti) has been reported in the past two years. Safety/security inspections are regular.

The VVAC carries insurance, $2 million in liability, $1 million for contents, and $1 million for special events.

**Suggested Priorities:**

1. It is suggested that staff members obtain training in CPR, Standard Red-Cross First Aid, and fire-extinguisher use.

2. A log for the monitor schedule for any fire detection/suppression equipment will help staff determine/track when and how damage is occurring and what equipment or improvements are needed.

3. Regularly update the Preservation Plan; Emergency Contact numbers should be updated regularly and be easily available in the event of an emergency. Family contact information is also important for all staff and volunteers working in the museum should something happen to them.

4. Staff from the Fire Department, Police, Border Patrol and Ambulance service should be invited over on an annual basis to learn about the museum and become familiar with the layout, the collection, and who to call in case of an emergency. Many museums have found that this special invitation proves to be very useful with special events, off-duty participation, and insures extra care during an emergency event.

5. The museum's insurance policy is reviewed annually. The following site has been helpful for other museums


**CONCLUSIONS**

The VVAC has made excellent progress in becoming a truly exemplary museum, repository, and research center. They have completed an enormous amount of work on extant archaeological collections from the Verde Valley of Arizona. As long term volunteers with the US Forest Service staff members have learned much of what repository requires. Working with Dr. Bostwick they are professionally reorganizing collections; repackaging collections and associated records for archival containers; building computer records; comparing field records; and clarifying descriptions. The VVAC operates as a professional organization. Their collections management and conservation policy and procedures have been carefully drafted over the past few years using acknowledged models and are functioning well. They have done their homework in ALL sections of the CAP assessment review process. **They are well**
qualified to be an archaeological collections repository for Federal, State, Town or private collections in Arizona. They are also is ready to apply for additional grants to better protect and preserve the collections.

This CAP survey was designed as an assessment activity to clarify collection care areas in need of attention and to identify areas that could benefit from future attention. An on-going relationship between the CAP conservator and the VVAC staff is possible. The CAP survey should augment the existing Preservation Plan, and many museums use CAP as the outline for their preservation plan because it identifies goals that will protect the collections, schedules the activities needed, and tracks the actions taken.

RESOURCES

- Small Museums And MAP
  The Museum Assessment Program (MAP), including Collections Stewardship Assessment is free to museums with budgets under $125,000. MAP is a one year program that consists of a self-study and peer review with a museum professional who visits the museum and writes a consultative report. MAP helps museums identify strengths and weaknesses; set priorities; get everyone in the museum (staff, board, volunteers) on the same page; make the case for resources for improvement; prepare for institutional change; and get mentoring and advice. Available through the American Association of Museums.
- StEP program
  American Association for State and Local History [http://www.aaslh.org/rlinks.htm]
- Reference Books: From American Association of Museums and other bookstores

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<td>Defining Memory</td>
<td>0-7591-1050-6978-0-7591-1050-2</td>
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<td>Starting Right</td>
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American Association for State and Local History Book Series [http://www.aaslh.org/rlinks.htm]

Other reference materials about museum work: [http://museumstudies.si.edu/Header2.html]
Items mentioned during the on-site visit

Bone Board measuring pots and ground stone
Wards Science Osteometric Board 148331  $155.00  www.wardsci.com/

Sirchie Photo Evidence Scale, Black/White, 105 mm x 105 mm, Item #: PPS800 $4.95
http://www.chiefsupply.com/sirchie-photo-evidence-scale-black-white-105-mm-x-105-mm.html

Tiffin Color Separation Guide with Grey Scale, 8" Size, #Q-13 $26.00
http://www.adorama.com


Volara® http://www.gaylord.com/Archival/Conservation-Supplies/Wrapping.-Lining-%26-Support-Materials/White-Volara%26%23174%3B-Polyethylene-Foam-(5-Pack)/p/HYB01371

(* note this may be available in a roll for a better price.)