MPMA 2020 poster session

Student poster presentations (n=13)

1. Kelsey Barnett
Graduate Fellow in Museum Science, Heritage and Museum Sciences, Museum of Texas Tech University, Lubbock, Texas

Saving Time: Creating Accessible Collections Through Phased Catalog Entry

Abstract – For all museums, the issue of balancing time with collections needs is ever present. Creating catalog records for collections with a large number of objects can take time away from other important projects. Three methods of catalog data entry have been tested for speed and accessibility while creating records for a large mineral collection with a previously documented inventory. After comparing the number of records created in a defined period of time per method, a phased entry format saves the most time and allowed for ease of access. This type of data entry turns the original inventory into a relational database by using catalog numbers and mineral DANA numbers, a mineral classification system, as common datapoints. This commonality ensures all original documentation is linked to the new, abbreviated records. Phased catalog entry is a method any museum can use to create time manageable projects while also maintaining collections management standards.

2. Rachel Chovan
Lubbock Lake Landmark Collections Research Assistant, Heritage and Museum Sciences, Museum of Texas Tech University, Lubbock, Texas

A Ventilated Storage Box for Gasoline and Paraffin Treated Objects

Abstract – Museum professionals often encounter collection objects that were treated historically with hazardous chemicals for pest prevention and preservation. Timber beam sections and corn cobs from sites excavated in Texas and New Mexico during the 1930s and 1950s have been identified as having been treated with leaded gasoline and paraffin. These chemicals off-gas, causing potential harm to museum staff and other collections. Modifying the standard storage box with ventilation windows and replacing non-compatible storage plastics with sympathetic materials, including unbleached cotton muslin and acid and lignin-free tissue paper, allows for the safe storage of treated objects. The ventilated box then may be stored safely on open shelving in a well-ventilated room. The treated objects thus receive the best possible standard of care, without compromising the safety of either staff or collections. Because no specialized materials are required, this method may be utilized by other institutions facing similar preservation and storage issues.

3. Glenn Fernandez-Cespedes
Lubbock Lake Landmark Research Assistant, Heritage and Museum Sciences, Museum of Texas Tech University, Lubbock, Texas

The Value of Virtual Reconstructions in Cultural Heritage: Bringing the Lubbock Lake Landmark's Singer Store Back to Life.

Abstract – Virtual reconstruction of the past can create a more tangible link between community and heritage in sharing archaeological findings without affecting the site's preservation and authenticity. As a test case, a virtual reconstruction has been made of how the Lubbock Lake Landmark's Singer Store (1883-1886) may have looked like before it was destroyed by fire in 1886. The Singer Store is the first merchandise store constructed on the Southern High Plains. While no images of the Singer Store exist, archaeological excavation has uncovered its location. The reconstruction has been created using *Revit 2019*, a Building Information Modeling software. The dimensions of the building and its characteristics are modeled after historical accounts and photographs of other similar trading posts of that era. The virtual reconstruction of the Singer Store provides a more tangible cultural heritage connection of its place for visitors to visualize the past at the Lubbock Lake Landmark.

4. Zachary Garrett
Graduate Fellow in Museum Science, Heritage and Museum Sciences, Museum of Texas Tech University, Lubbock, Texas

Resolving Registration Roadblocks – the Role of Research and Rehousing

Abstract – Collections objects with incomplete provenance and lacking appropriate housing are a common museum problem. A collection of 11 maquettes that had accumulated in the Registrar's workroom at the Museum of Texas Tech University has had unknown title status, limited provenance documentation, and lacked object-specific packaging and permanent storage locations. A plan has been created and implemented to establish title and provenance, accession the models, and determine the best way to package and store the models. Archival research has been used to ascertain ownership and provenance. A storage strategy and location have been determined for the collection, and custom-made boxes created for two of the objects. Of the 11 maquettes, clear title has been established for eight, that then were accessioned. The owner of one maquette has agreed to donate it to the Museum and it was accessioned. The remaining two have been returned to the owners. Resolving registration issues highlights the usefulness of institutional archives and importance of maintaining them, the need for clearly defined and implemented loan agreements, and the benefits of custom packaging.

5. Lucchese Hamilton

Helen DeVitt Jones Fellow in Heritage Management, Heritage and Museum Sciences, Texas Tech University, Lubbock, Texas
Identifying and Overcoming Barriers Between Students and Museum Resources

Abstract – Despite studies confirming the value of experiential and informal learning, many teachers do not take advantage of local museum resources. It falls to museum educators to identify common barriers keeping teachers from utilizing the museum and to enact methods of overcoming them. Surveys, consisting of multiple choice and open-ended questions, have been conducted with elementary and middle school teachers. Question topics include the number of field trips the class participates in annually, reasons the class does not take more, and whether more museum involvement would benefit students. The response differences between large and small, rural and urban, and elementary and middle schools are of particular interest. COVID-19 restrictions and time, budget, and curriculum restraints are among the results regardless of category. The results suggest a few approaches that may be of general use. Museum educators must find creative solutions to their individual situation, but community partnerships, increased dialogue with teachers, and continued integration of state educational standards are essential strategies.

6. Emily Ladd
Lubbock Lake Landmark Heritage Intern, Heritage and Museum Sciences, Texas Tech University, Lubbock, Texas

Alternatives and Opportunities: Increasing Heritage Accessibility and Availability Through 3D Modeling

Abstract – An issue facing museums is how to display heritage with limited availability due to condition, size, or physical accessibility. 3D-modeling and printing offer alternatives to the original object and provide more engaging tactile experiences for guests. The historic Jumbo Ranch headquarters, a site to which access is greatly restricted, is a case study for using 3D-modeling to increase public interaction with heritage. Photogrammetry has been utilized to digitally model the artifacts and cultural landscape of the Jumbo Ranch site. 3D-printed replicas of the artifacts have been made and can be accessed as needed. Interactive elements have been added to the digital landscape model that was uploaded to the 3D-asset sharing website Sketchfab. Uploading the model has allowed it to be embedded in the Lubbock Lake Landmark's website and made accessible to the public. Otherwise unavailable heritage of such places as the Jumbo Ranch now can be brought to museum audiences.

7. Autumn L. Langemeier
Public and Digital History, History Department, University of Nebraska at Kearney, Nebraska

Clothing and Class: Ella Frank's Wedding Day

Abstract – Textiles can provide a vehicle by which museums can engage visitors in discussions of class, race, and gender. *Clothing & Class: Ella Frank's Wedding Day* at the G.W. Frank Museum of History and Culture uses textiles to facilitate conversations on issues of class within rural Victorian homes. By utilizing the dressing room space to present a snapshot of the life of the original owner's family and servants, the exhibit explores the disparity between classes as well as the role of servants in formal events. The goals of the exhibit are to generate a greater understanding of Victorian class issues and raise engagement with guests. Results of a questionnaire feedback measures the success of achieving those goals and provides direction in undertaking future textile exhibits. Innovation in textile exhibits, regardless of museum type, is crucial to the continued interest and education of the public.

8. Annie Pflaum
Public and Digital History, History Department, University of Nebraska at Kearney, Nebraska

Reinterpreting Fort Kearny State Historical Park through StoryMaps

Abstract – The interpretation at Fort Kearny State Historical Park remains rooted in frontier myth and military history, struggling to attract contemporary audiences. As part of its master planning process, the Nebraska Game & Parks Commission is using a StoryMap developed in conjunction with the University of Nebraska at Kearney to provide an interactive, visual history of the park to engage the public further. Based on original research in the Fort Kearny State Historical Park archives and field surveys of the park, this StoryMap shares the history of the fort and its development as a historical park. The results help to educate the public about how Fort Kearny State Historical Park can be more than just a historic military outpost. It also is a place for discussions of Western expansion, enslavement, and Indigenous dispossession with continued significance for a variety of communities.

9. Darcy Phillips
Helen DeVitt Jones Fellow in Museum Science, Heritage and Museum Sciences, Texas Tech University, Lubbock, Texas

Conventional Treatments for Unconventional Objects: The Moldy Sherd Mystery

Abstract – Mold is always present in the environment and it takes only a short time with the proper conditions for an infestation to occur. While extensive literature exists on the treatment of mold in organic collections, very little is published on treating mold infestations when they occur on inorganic objects such as pottery. After investigating the methods used to treat mold infestations on organic objects and comparing safe treatments of low-fired ceramics, a treatment plan for two infested and six contaminated low-fired potsherds has been developed. Infested potsherds have been heat-treated and vacuumed under a fume hood, and all sherds were treated by rolling ethyl alcohol

swabs over the surface. The treated potsherds have been placed in recessed packaging with high sides to allow air circulation and sealed in a plastic bag with a desiccant. Monitoring of the objects is ongoing to ensure the treatment was effective. Porous, low-fired pottery can be an ideal habitat for fungal growth, and in the absence of material specific treatments, other methods can be adopted and adapted to address the problem.

10. Olivia Rovelli
Helen DeVitt Jones Fellow in Museum Science, Heritage and Museum Sciences, Texas Tech University, Lubbock, Texas

The Importance of Disaster Preparedness in Collections

Abstract – Museums and other professional institutions housing collections have to be acutely aware of the potential dangers that collections could encounter. The Anthropology Division of the Museum of Texas Tech University recently has experienced a flood in one of the rooms where collections were stored temporarily before they were installed into long-term housing. Almost all documentation associated with the objects stored in that room has been held in the acid-free boxes with the objects. Instead of continuing that practice, the documentation has been removed, inventoried, and organized, as well as entered into the division's database. In order to avoid potential loss of documentation, utilizing a more immediate system of document installation would bypass the risk of records and object loss in situations such as flooding. The prioritization of creating records for the documentation in a museum-specific database reduces the risk of information loss that would be detrimental to a collection.

11. Josie Sneed
Museum Studies Program, University of Central Oklahoma, Edmond Oklahoma

The Oklahoma Lunacy Bill

Abstract – In 1915, the Lunacy Commission adopted a plan through Oklahoma Senate Bill 425 for the proper care and treatment of the insane. Through a partnership with the Oklahoma Territorial Museum, an exhibit titled The Lunacy Bill is set to open in January 2022. The outdoor exhibit space consists of four text panels and graphics that explore the history and outcomes of the legislation. As the foundation of the state mental health system, the public is mostly unaware of the history because of the taboo nature of the topic. Research results enrich the exhibit that aims to raise public awareness and foster education. Patients endured such treatments as shock therapy and beatings from staff, and they resided in underfunded and dilapidated living quarters. Advocates pioneered for deinstitutionalization of overcrowded residential facilities and humane treatment of patients, thus improving their circumstances. Awareness of the historical plight of

mental health patients in Oklahoma is key to ensuring that knowledge is preserved and history does not repeat itself.

12. Mattie Sparks
Heritage and Museum Sciences, Museum of Texas Tech University, Lubbock, Texas

Making Your Inventory Work for You

Abstract – The practice of passive collecting compounded with incomplete to non-existent documentation puts strain on limited space for housing museum objects according to preventive conservation guidelines. To address problems stemming from past passive collecting, a spot-check inventory and condition assessment have been performed for the food preparation and kitchen appliances collection and by comparing the last recorded inventory with the current holdings. The completed inventory and assessment have provided an accurate count of the objects contained in the collection and identified problems with documentation and storage. These results have produced the foundation for a gap analysis that determines redundancies and gaps. The gap analysis results are used to identify trends in kitchen history that are over or underrepresented. The completed gap analysis data allow for informed collections planning decisions and strategies for organizing and housing the Museum of Texas Tech University food preparation and kitchen appliances collections that align with current preventive conservation recommendations.

13. Madison Westfall
Helen DeVitt Jones Fellow in Museum Science, Heritage and Museum Sciences, Texas Tech University, Lubbock, Texas

Documenting Changes – A Checklist for Problem Prevention

Abstract – The Roland Springs Ranch collection consists of sub-fossil bones that are 2.6 million years old and temporarily housed at the Lubbock Lake Landmark during collections processing and analysis. Collections management issues have been caused by the duplication of catalog numbers and a lack of proper follow-up when catalog numbers were corrected. This situation has led to confusion over which catalog number was correct. To address this problem updates now have been made to all paper documentation, objects relabeled and retagged, and a note made in the database. While bringing the documentation up to standard and relabeling the objects, a checklist detailing what should be done when catalog numbers are changed has been developed. This standardized checklist now is given to collections staff when catalog numbers need to be changed to prevent similar problems from occurring. The checklist is something that could help all collections, regardless of type, to avoid similar situation from happening.

Professional poster presentation (n=5)

1. Alyssa DeWaele and Jennifer Girón
Heritage and Museum Sciences, Museum of Texas Tech University, Lubbock, Texas
Natural Science Research Laboratory, , Museum of Texas Tech University, Lubbock, Texas

Digitizing Biological Collections at the Museum of Texas Tech University – Optimizing Workflows

Abstract – Digitization has become an increasingly integral part of museum curation and public access, allowing previously inaccessible information to be spread widely. The Natural Science Research Laboratory at the Museum of Texas Tech University holds about 4.6 million specimens in the Invertebrate Zoology collection, with nearly 175,000 records currently available online. To tackle such a large volume of specimens, digitization workflows are being optimized. Initially, individual specimen information has been entered into the Symbiota Collections of Arthropods Network database system one at a time, spending about 10 minutes per specimen. Using free digitization software that allows processing batches of specimens at once, the optimized workflow has reduced the time to nearly five minutes per specimen during the early stages of testing. The use of free digitization software would allow other collections to accelerate digitizing projects effectively by using optimized workflows.

2. Rachel Gruszka and Katie Holt
Collections Manager – Anthropology, Museum of Texas Tech University, Lubbock, Texas
Assistant Collections Manager – Quaternary Research Center, Lubbock Lake Landmark, Lubbock, Texas

What's Your Status – Structuring Databases to Track Collections Efficiently

Abstract – The Lubbock Lake Landmark's Quaternary Research Center (QRC) processes over 100,000 field generated objects per year and is responsible for the collections management of these objects until they are transferred to the Anthropology Division of the Museum of Texas Tech University for long term housing. Collections management on this scale is achieved through the employment of multiple in-house generated FileMaker Pro databases. A database created to track the status of individual boxes within the QRC has proven inefficient as it recorded information redundantly and lacked a holistic approach to collections. That database has been updated to track status at the collection level, with linked relational tables for each box, and for other associated materials such as jackets and pedestals. Focusing on collection-level information has provided a more comprehensive understanding of the collections at the QRC as they move through different processing stages. Centralizing data in a relational structure allows for more efficient resource management and better allocation of staff time across all types of collections.

3. Paulette R. Hebert
Professor, Design, Housing and Merchandising, Oklahoma State University, Stillwater, Oklahoma

Examining a University Partnership During Covid-19 and Virtual Accreditations: Design Program and Art Museum

Abstract – The University design program considered “partners” for accreditation, with the accreditation site visit to be virtual due to Covid 19. The University’s art museum (UAM) was simultaneously undergoing accreditation. In the third-year design studio course, students design a museum. Due to the pandemic, the course moved to synchronous-online. For accreditation, researchers reviewed documents for 25 courses over three years: 1) syllabi, 2) assignments, 3) student inputs, 4) student outputs. UAM was not specifically mentioned in any syllabi or assignments. UAM featured heavily in student inputs and outputs for one design studio. Students were provided five short videos about UAM: tour, interviews, artifacts examination, pros and cons of special features (Mila wall, display cases), digital catalog tutorial. The partnership grew during pandemic with the studio course relying on UAM resources. Design faculty member participated in a zoom panel meeting with UAM accreditation site visitors. Virtual site visitors expressed surprise and pleasure about the partnership.

4. Paulette R. Hebert and Hebatalla Nazmy
Professor, Design, Housing and Merchandising, Oklahoma State University, Stillwater, Oklahoma
Assistant Professor, Design, Housing and Merchandising, Oklahoma State University, Stillwater, Oklahoma

Exploring the Grand Egyptian Museum: A Content Analysis

Abstract – The Grand Egyptian Museum (GEM) will open in late 2021 and overlook the Giza Pyramids, near Cairo. The world’s largest archaeological museum will house over 100,000 artifacts with many important implications for archaeology, culture, research, tourism, and more. The researchers hypothesized that there would be scant scholarly publications prior to the museum opening. This exploratory study adopted a content analysis approach to examine germane scholarly research publications. Researchers accessed Google Scholar utilizing the term: Grand Egyptian Museum. The first 20 relevant, scholarly hits were examined. Results included journal articles, theses, and academic books. Content spanned six categories: 1) exhibited artifacts (e.g., cartonnage [innermost piece that enveloped mummy], funerary fragments, gilded statuettes, King Tutankhamun’s treasures, obelisks, stela, temples); 2) culture and ritual context; 3) Technology (remote sensing, digitizing collections); 4) tourism (promotion and enhancement of international tourism, pre-visit destination image); 5) facility design and management (sustainable management of construction waste, building design, 4-D Movie Theater, indoor air quality, preservation); and 6) research. Although the GEM is

not yet open, the researchers were surprised to find much attention, excitement and opportunity already manifested in the numerous scholarly publications.

5. Michael A. Mayhew and Michelle K. Hall
Senior Research Scientist, Science Education Solutions, Inc., Los Alamos, New Mexico
President, Science Education Solutions, Inc., Los Alamos, New Mexico

Teen Science Cafés Opening Minds and Doors

Abstract – Many Americans are confused about science, its methods and findings. Few citizens grasp that science is a process through which a reliable understanding of the physical world is gained. Teen Science Cafés are an antidote for this problem. They are a mix of a short TED-style story on a science topic relevant and intriguing to teens, with conversation with a scientist to explore new ideas, and hands-on activities on the topic. The mix of these elements in a social setting causes teens to report that they now see science everywhere in their lives and come to see scientists as real people having interesting careers. The program has positively influenced teens' understanding of science issues in the news, their ability to use facts to support scientific points of view, and to consider multiple sides of an issue. Teen Café programs are free, guided by teen leaders, and continuously evaluated and improved.