

GUIDELINES FOR PREPARING LEGACY ARCHAEOLOGICAL COLLECTIONS FOR CURATION

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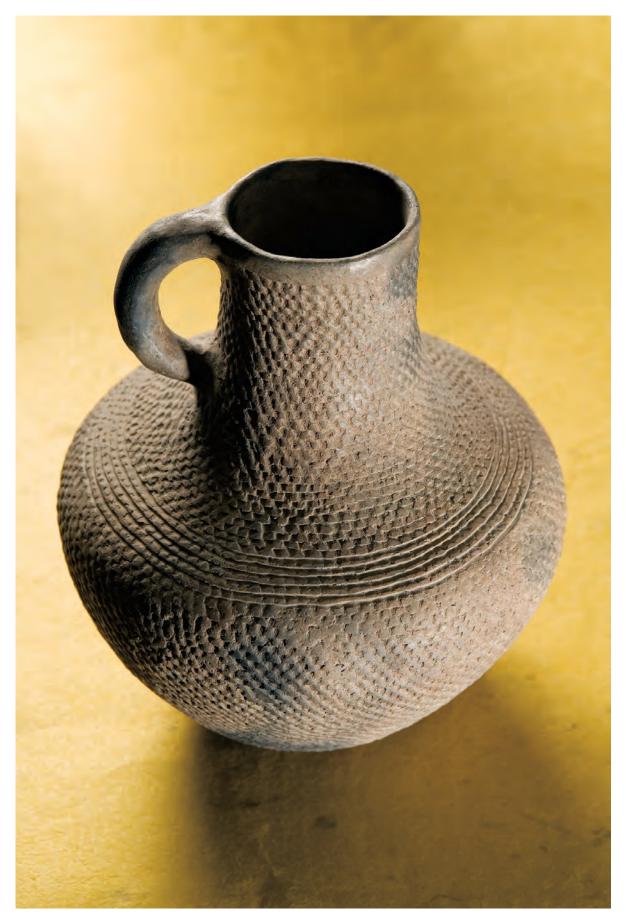
ACKNOWLEDGMENTS

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Corrugated pitcher, Fremont. Courtesy of Natural History Museum of Utah (UMNH), CM.54809



I. INTRODUCTION



In 2017, the SAA Board asked the Committee on Museums, Collections, and Curation (CMCC) to consider drafting guidelines for archaeologists who are responsible for, or are aware of, collections that should have been curated long ago. For various reasons, these collections were not curated, often beyond the control of the archaeologist. Realizing that preparing old collections for curation could easily become overwhelming—and potentially result in an abandoned collection—these guidelines were developed to help navigate the process.

You may work in academics, cultural resource management, or with a government agency. You may have made the collection yourself, "inherited" it from a colleague, or received it from an avocational collector. Whatever the circumstances, if you are the current caretaker of legacy collections, it is in everyone's best interest that they be properly curated at an established repository with trained staff to care for them long-term.

We understand that motivating yourself to get started is the hardest step, so we encourage you to take the time to read through these guidelines. As you familiarize yourself with the process, you will find that preparing collections for curation is more feasible than you imagined. If you have a question about something in the guidelines, contact the CMCC chair (the SAA website has a list of current committee members) or your local museum for assistance. Museum professionals share your goals and are here to help.

CONTENT OF THE GUIDE

Guidelines for the Preparation of Archaeological Collections for Curation

The guidelines provide an overview of tasks and considerations that are necessary prior to transferring collections to a repository. The Principles of Curation (Section 2) begins with a few definitions, an overview of the subject, a short discussion on who is responsible for ensuring that collections are properly curated, and an explanation of what comprises a collection.

The critical first steps in Planning for Curation (Section 3) are to establish ownership of the collections (i.e., landowner at the time of collection), obtain all legal documents pertaining to the collecting activity, and identify the most appropriate curatorial facility for that collection. These steps are covered in sections 3.1 to 3.3.

A lack of funding to cover the costs of curation is likely the primary reason why collections were not curated in the first place. Funding Curation (Section 4) provides advice on how to create a curation budget, identifies potential funding resources, and suggests some creative workforce options at your disposal. The guidelines will also introduce you to general principles of Preparing Collections for Curation (Section 5).

There are no universal artifact preparation standards for curation, so it is critical that you work closely with a repository to identify how collections should be curated to meet the repository's particular requirements. If human remains are part of the collection, the guidelines will provide you with an overview of pertinent regulations and how they might pertain to your circumstances (Section 5.2).

Collections Assessment

Prior to investigating potential repositories, it is critical that you have a good understanding of what comprises the collections in your care. After you've organized your collections by project, the collections assessment (page 4) should be your starting point.

Reference Material

For those who are looking for a deeper understanding of artifact preparation than what is provided here, we have listed a selection of useful articles, books, and archival material suppliers in Sections 6.1 and 6.2. However, these resources should only supplement instructions you receive from a curatorial facility

Curation Checklist

Preparing artifacts for curation can seem overwhelming. The checklist in Section 6.3 organizes common tasks into easy, chronological steps to assist you with the management of the project. The repository where you will be depositing the collections may have additional steps, so feel free to modify it to suit your needs

Curation Cost Worksheets

There are multiple ways to calculate the cost of preparing collections for curation. The worksheets in Section 6.4 can be adapted to suit your needs.

I.I WHY CURATE?

Archaeological curation is the professional longterm management, care, and interpretation of artifacts, ecofacts, and associated records. The high level of care that curated collections receive in repositories is indicative of the importance that we, as a society and a discipline, place on their usefulness for scholarly research and public education. What would museums and archaeology be if not for their collections?

There are ethical, contractual, and legal reasons for curating collections. An informal poll of our colleagues illustrates that reasons for not curating collections are many, although time and money frequently appear at the top of the list. Collections that are not curated in a repository are at risk of loss or damage and are inaccessible. It is essential that the collections are taken to an appropriate repository so that they can be cared for and made accessible for research and the benefit of the public.

1.2 COLLECTIONS ASSESSMENT

I.2.1 Organizing collections

The collections may span many years of work from a variety of projects. We suggest you treat each project as a discrete collection, as each will have legal implications that will need to be addressed separately. Joining projects together will only complicate matters at a time when simplicity is paramount. For example, a collection made in 1986 on BLM lands in Nevada will have different legal implications from a collection made in 1975 on private lands in New Mexico. In fact, you may find that each collection is better served in different repositories; organizing them as separate units will facilitate these efforts. Once the collections are organized, we recommend you start by cataloging the artifacts and associated records; often this will be based on the field specimen catalog. The size and scope of the collection will likely be one of the first questions a collection manager will ask. Likewise, quantity estimates for each artifact type will help with the collections preparation budget.

I.2.2 Assessing the collections

The next step in organizing the collections for curation is to assess what there is and what will be needed to begin discussions with a repository. The questions in the collections assessment are carefully designed to facilitate a fruitful working relationship with a potential repository. We highly recommend you complete an assessment for each collection separately.

The collections assessment will help you determine where the collections should go, what kind of artifact preparation you can anticipate, and cost considerations when readying the collections for curation. For example, if a collection is from federal lands, then you will be restricted to a repository that complies with 36CFR79 (Curation of Federally-Owned and Administered Collections). Also consider the region where the artifacts originated and the possibility of depositing them in a curatorial facility that has similar collections. Not all curatorial facilities accept certain collection types, so this should be a major consideration as well. If the collection was recovered from public lands, it is critical that you contact the appropriate public agency in the first stage of your curation preparations and consult with them on what your next steps should be.

COLLECTIONS ASSESSMENT

Print and complete by hand or use fillable pdf available online at SAA.org

0	in and ownership of the collection (<i>your answers will identify the applicable laws and regulations</i>) Q1. Is the collection from the United States or foreign?
	A
	Q2. If from the United States, was it recovered from federal, state, municipal, tribal, or private lar or some combination? List all that apply.A
	Q3. If from federal lands, is it from a single agency's/tribe's lands or some combination? List all t apply.A
(Q4. Is the collection part of a completed academic, CRM, or internal government agency project A
	Q5 Was the collection given to you by a private individual? If this was a gift, do you know where i was collected?A.
	Q6. What is the date of the collecting activity? A
	 Q7. Is it a comparative collection that does not fall under ARPA or similar archaeology laws? (If y go directly to section C: Nature of the collection) A
Ͻοϲι	umentation of the collection (this is paperwork that the curation facility will request)
	Q1. Do you still have copies of permits for this work (if applicable)? A
(Q2. If the collection is from outside the United States, do you have all accompanying paperwork its removal from the country of origin (if required)?

. If you are with a government agency and the undertaking involved several landowners, wer	e
you the lead agency? If so, do you have an Interagency Agreement?	

Q4. Do you have a Deed of Gift or other documentation from a private landowner? **A.**_____

A.

Q5. Do you have a repository agreement with a curation facility for this collection? A.

C. Nature of the collection (this will establish what kinds of preparation will be required)

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O 1.	IS	the.	artitact	collection	organic	inorganic,	or a cot	mbination	of both?
×			the creater	concetton	organie,	morgane,	01 4 001		or sour

Α.

Q2. Is the artifact collection prehistoric, historic, or a combination of both?

A._____

Q3. Do you have the associated records (e.g., site forms, excavation notes, photographs, etc.)? Are they the original records or copies?

A._____

Q4. If yes to question 3, what formats are they in (e.g., paper, photographs, digital)? A._____

Q5. What is the estimated size of the collection (in cubic feet or number of objects)? **A.**

Q6. Are there any oversized objects to consider (i.e., objects that won't fit in a standard museum box 13" x 16" x 10" H)?

A._____

Q7. Are you in possession of the entire collection or have subsets been lent out or given to other colleagues or institutions? If the latter, do you have the accompanying paperwork?

A._____

D. Human remains (this will establish any legal requirements that need to be addressed)

Q1. Are there any human remains in the collection?

A.

Q2. Were the human remains recovered before or after November 16, 1990?

	Q2 Were they every at a part of a project?
	Q3. Were they excavated by you as part of a project? A
	Q4. If no, are they a subset of an individual that was given to you for research purposes?
	A
	Q5. If the human remains are Native American or Native Hawaiian and from federal or tribal hwere they identified as Culturally Affiliated or Culturally Unidentifiable?
	A
11	erent condition of the collection (this will help determine workload requirements)
	Q1. Have the artifacts and records been inventoried, analyzed, and repacked in acid-free archiva boxes? List all that apply.
	A
	Q2. Are the artifacts labeled?
	A
	Q3. Are any of the objects especially fragile or do they require special care?
	A
	4 4 4 4 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
a	ilable resources (this will help determine what assistance may be available to you)
	Q1 . Do you have funding to rehouse and curate all or part of the collection? A.
	A
	Q2. Do you have students or volunteers to assist with curation preparation?
	A
	Q3. Are there any museum professionals that you can call to answer questions and guide you through, or assist with, the preparation process?

Q4. Have you tried contacting the permitting agency or university for additional funding to curate the collection?

A.____

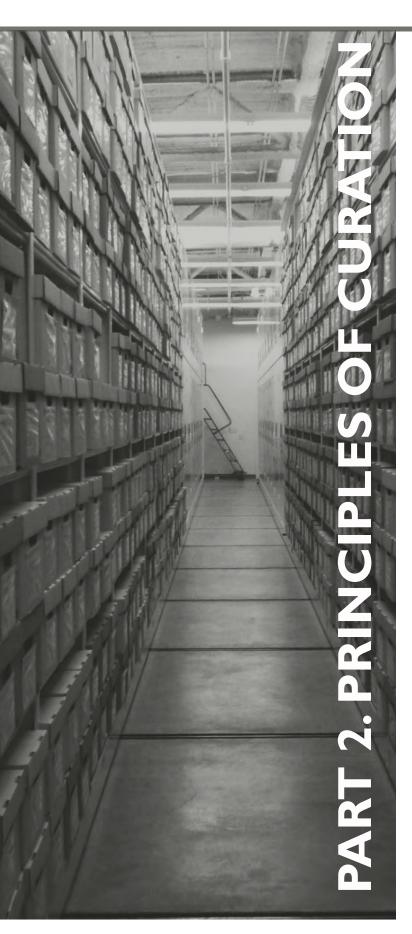
I.2.3 Communicating with repositories

The collections assessment will prepare you to answer questions that a repository is likely to ask about the collections. We highly recommend you initiate a conversation with repository personnel before you start processing any collections. Each facility will have slightly different preparation requirements, curation costs, and document requirements. Preparing collections before you have an agreement with a repository could result in significant amounts of wasted time and money. Once you've made initial contact, continue to develop a working relationship with the repository's staff as this will greatly facilitate the process.

Importantly, never assume that a curatorial facility will accept the collections. They have a right to reject any collection that falls outside of their Scope of Collections or is a collection type that they cannot adequately care for (e.g., shipwreck artifacts). Having conversations with curatorial staff is critical to determining if they will take the collection and what will be required to prepare it according to their standards. If they cannot take the collection, they may be able to assist you in finding a repository that will.



Unfired clay figurine, Fremont. Courtesy of Natural History Museum of Utah (UMNH), CM.79568



2.1 DEFINITIONS



Collections—a broad term that we use in this document to refer to any objects or records systematically collected or produced by research or contract work. Material objects and the records that provide context for the objects are the two main categories, and each in turn encompasses a series of subcategories.

Collection manager/Curator—the repository staff that work with collections. Depending on the size of the repository, the collection manager and curator may be different people with different responsibilities or be the same person with a broad set of duties. For the purposes of these guidelines, a curator is the person who determines if a collection will be accepted into a repository while the collection manager is responsible for ensuring that incoming collections are up to repository standards.

Curation agreement—a written document used by most museums and repositories to specify the terms under which they will accept a collection. Such agreements are usually standardized contracts that can be modified to suit specific needs of a given collection, and are signed by both the depositor and a representative of the repository.

Legacy collection—this term describes a variety of collected objects and materials, but is primarily used here to refer to collections made during one's career for which no museum or repository was formally designated. These might, for example, consist of objects/notes/maps/photographs from small volunteer projects, type collections of ceramic sherds or lithics, chronometric or sediment samples,

2.1 DEFINITIONS (CONT.)

general field notebooks, or even collections of photographs from site visits or projects in which you participated during your student days. Alternatively, they may be large collections of objects and associated records which, for a variety of reasons, were not submitted to a repository.

Legacy collections may be subdivided based on whether they were the products of academic research or CRM investigations. In turn, they can be further differentiated by separating those obtained from private land versus public land. Each grouping may have important implications for how repositories choose to deal with the collections, and in the consideration of potential sources of funding for curation.

Registrar—staff responsible for documentation of collections and often for risk management. They develop and maintain records of collection activities, create and implement museum policies and procedures, and establish a museum's legal rights with regard to collections.

Reposited collections—collections that are curated at a repository, but owned by a public agency or tribal government. These are distinguished from permanent collections, which are owned by a repository. Repositories that hold reposited collections from federal lands must comply with regulation 36CFR79.

Repository—the museum or other facility where collections are curated, managed, preserved, and made available for research or public use. Repositories typically hold objects and records documenting those objects or other kinds of research materials.

2.2 PRINCIPLES OF CURATION

The most important principle of curation is to ensure that all of the materials that comprise a collection are well-ordered and labeled. If you are the person who generated the collection, you are in the best position to accomplish this. Organization of the objects and records into coherent units is essential, and ensures that a museum or repository can curate the collection so that future researchers will be able to make best use of it. The records are absolutely essential in providing future researchers a complete understanding of how the investigations were conducted and the precise context of the material objects. Thus, filing an explanation of the recording system with the associated records is highly recommended.

All museums have curation standards concerning object housing/packaging and physical and digital storage of records (see Section 5). If the collections were made years ago, they may not be up to contemporary curation standards. However, if the collection is well ordered, it may be a relatively simple matter to rehouse the objects and records in appropriate archival materials. Ensuring that all individual objects or bulk lots of objects within bags are labeled, and that individual catalog numbers (and a corresponding comprehensive catalog) have been assigned greatly facilitates curation.

Ideally, all objects and records that go together as parts of a particular collection should be submitted at the same time rather than piecemeal. Communicate with the repository staff to identify a reasonable timeline.

2.3 CURATION OBLIGATIONS

With few exceptions, the person or agency who initiated the project has principal responsibility for ensuring that the resulting collection is properly curated. Or, it may be the current caretaker of the collection, who is acting on behalf of the project initiator. Responsibilities include selecting the most appropriate repository for the collection, preparing the collection for curation, and securing funding to facilitate curation. This responsibility is recognized in Principles No. 1 and 7 of the Society for American Archaeology Ethics policy (1996), and is underscored as part of Principle 3 of the Institute of Field Archaeologists (2014); similar statements can be found in ethics policies for local, state, national, and international archaeological organizations.

To reiterate the relationship between project initiation and curation responsibility, collections made as part of an independent research project are the responsibility of the researcher regardless of landowner. This includes securing funding for curation costs, even if the collection came from public lands. Likewise, research collections from private or tribal lands will have curation costs that must be financed by the project rather than by the private or tribal landowner. Conversely, if a collection was made as part of a Section 106 compliance project and curation costs were not in the contract, then the federal agency that initiated the project needs to be involved in determining funding for curation.

2.4 COMPOSITION OF COLLECTIONS

When thinking about the collections you have, we encourage you to think broadly!

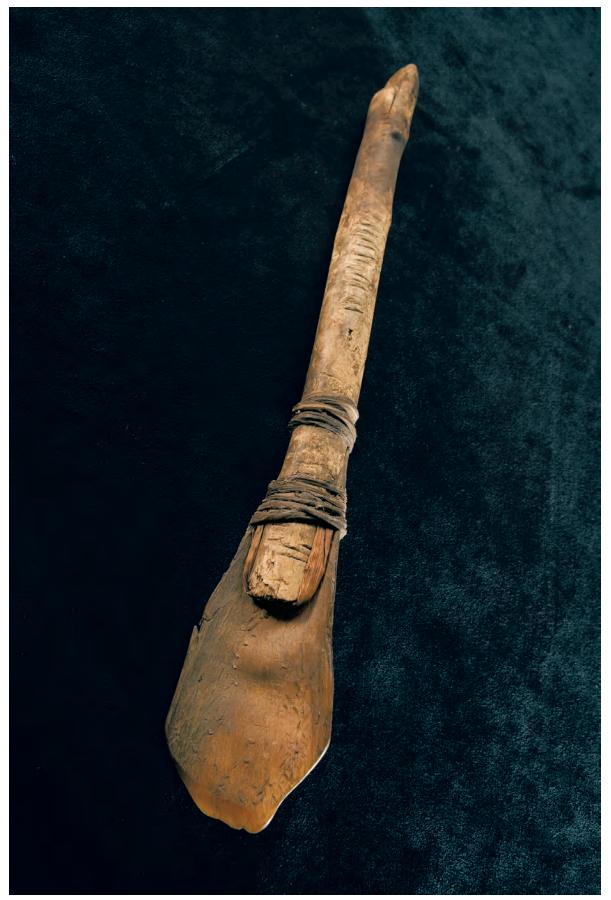
Note that collections may be site-specific, project-specific, or more general. More general collections might consist of comparative specimens used to help identify archaeological objects, including lithic or ceramic types, comparative faunal or floral specimens, or collections of casts. Similarly, the documentation associated with such general collections is important, but it is also possible that stand-alone, general documentary records may be valuable. Examples might include photographs of sites or places taken decades ago, which might document conditions as they were at the time. Even if you weren't in charge of a project, the records may provide important documentation to augment existing information.

Material Objects

While artifacts are the most obvious example, other kinds of objects are included. A short but not exhaustive list might include flaked or ground stone, ceramics, woven materials, worked or unworked minerals or rocks, faunal remains, and a variety of sample types, including plaster, flotation, chronometric, paleoenvironmental, and so forth. Other material objects that are not related to a specific project could, for example, include specimens representing particular lithic material sources, ceramic type collections, or stone tools used in experimental archaeology.

Associated Records

Associated records provide context for material objects, including, but not limited to, maps, notes, photographs, field forms, permits, landowner letters of donation, correspondence, reports, or manuscripts. It is possible that some projects will not include material objects, but may consist solely of associated records. Digital files are also important records and might consist of hardcopy records that have been digitized, digital photographs, or datasets related to field or analytical efforts. Very large datasets such as those from LiDAR or GPR, may exceed the capabilities of many museums to store them digitally, so alternative storage solutions should be considered, such as the <u>Digital Archaeological Record</u> (tDAR).



Hoe, Kayenta Branch Puebloan. Courtesy of Natural History Museum of Utah (UMNH), CM.49395

UNITED STAT DEPARTMENT OF THE Office of the Sector	ERI(tar;
PERMIT TO CONDUCT WORK UPON LANDS OF THE UNI PRESERVATION OF AMERICAN ANTIQUITIES APPROVED JO 16 U.S.C. 432, 433) AND THE REGULATIONS THEREOND	
	1
1. Permit issued to: Dr. Jesse D. Jennings	
 Name, address, and official status of pe in 1 - In general charge <u>Dr. Jesse D. Jenn</u> Curator of the <u>Museum of Anthropology</u>, University 	ing
2 - In actual direct charge	
3. Under application dated: <u>April 10, 1958</u>	
4. Authorizes: you to do archeological reconnai	sai
5. On lands described as follows: Departmen	th
of Utah, exclusive of National Park Service a	rea
6. For the period: Calendar year 1953	
 7. This permit is subject to the provisions of American Antiquities approved June 8, 1900 lations promulgated thereunder (copies av special conditions: (a) Before undertaking any work on lands aum Affairs, clearance should be obtained from a P. O. Box 7007, Phoenix, Arizona. 	che
(b) The Department of the Interior, its pure blameless for any and all events, acts, dep the Indian reservations, regardless of when study or research or not. The Government ass bility in such matters. Such protection the duties of the superintendents of the a tion in Government facilities cannot be grant expense to the Government is involved. It of the permit.	t be a be be be be be
8. Within approximately six weeks of the correport of work performed under this permit, photographs, and listing new and significant furnished the Secretary, Smithsonian Ins 1.4 of should be forwarded to this Department.	ill cc ior
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3.1 ESTABLISHING OWNERSHIP



Knowing the provenience of collections prior to contacting a repository is critical. Ownership establishes the legal rights of a repository to transfer ownership of a collection (i.e., from private lands) or to curate it on behalf of another entity (i.e., from federal, tribal, or state lands). These distinctions differentiate permanent and reposited collections, respectively.

Collections made in the United States typically fall under four categories of ownership: federal, tribal, state and municipal, and private. Often referred to as "landowner at time of collection," this vital piece of information should be your starting point for any conversation with a repository and agency, as appropriate. Keep in mind that landowners change over time, so you should avoid using current GIS maps to identify the landowner at the time of collection. Instead, you will need to refer to original site forms, permits, or other documentation.

3.1.1 Public lands

For federal collections, regulation 36CFR79 requires that all artifacts from federal lands be placed in a repository that meets the criteria set forth in section 79.9. The regulations apply to all collections made under the authority of the Antiquities Act (16 U.S.C. 431-433), the Reservoir Salvage Act (16 U.S.C. 469-469*i*), section 110 of the National Historic Preservation Act (NHPA; 16 U.S.C. 470*h*-2), or the Archaeological Resources Protection Act (ARPA; 16 U.S.C. 470*aa-mm*). The regulations apply to preexisting as well as new collections. Repositories will want to know the responsible federal land manager, which should be easy to identify based on locational information.

Collections made on state or municipal lands will be regulated by the appropriate local agency. In many instances, the designated repository is the state museum, although other state-affiliated museums may be able to accept collections from state lands with the designated museum's approval. If you have collections from state lands, we suggest starting a conversation with the State Historic Preservation Office (SHPO) or state museum of natural or cultural history.

3.1.2 Private and tribal lands

Collections made on private lands in the United States are, with few exceptions, the property of the landowner. Unlike state and federal land managers, who are required to reposit their collections at a state or federally approved repository, private landowners can retain their collections. If the landowner wanted to keep the artifacts, you are responsible for returning that collection to the landowner or their heirs. If the landowner agreed to relinquish ownership of the collection, you must follow their directive for final disposition. Directives are typically stated in a Deed of Gift or correspondences. The former is a legal responsibility (i.e., property law) while the latter is a matter of professional ethics. If, after due diligence, you cannot locate the original landowner or heirs to secure their intent for the collection, contact the appropriate SHPO or repository, for assistance in navigating abandoned property laws.

Control of collections made on tribal lands depends on when they were collected. Objects removed from Indian trust or restricted lands between June 8, 1906 and October 31, 1979 are under the control of the federal government (managed by the Bureau of Indian Affairs, or BIA). With the enactment of ARPA on October 31, 1979, the Indian tribe or individual Indian landowner received control of property from Indian trust lands. Collections that are the responsibility of the BIA (pre-ARPA) would likely need to go to a repository designated by the BIA. Determinations of final disposition by Indian tribes (post-ARPA) may result in a request to return the artifacts to the tribe or to gift or loan them to a repository for safe keeping. For the latter two scenarios, you should work with the tribe to identify the most appropriate repository. If you are unsure of which tribe to contact, we suggest calling the BIA, which has 12 regional offices around the United States, for assistance.

3.1.3 Multiple or unknown landowners

Some projects (e.g., power line surveys) cross multiple landowner properties. If the collection is from a project that has multiple landowners, you should consider the most stringent curation requirement and apply that to all of the artifacts in the collection in order to avoid splitting the collection between repositories. For example, if one of the sites is from federal lands, then the entire collection (regardless of landowner) should go to a repository designated by the land-managing agency or bureau. An exception to this rule is if private or tribal landowners (post-ARPA) choose to retain control of their artifacts. In this case, you only need to concern yourself with the federal and/or state collections.

Rarely, a single site is divided between multiple landowners. Try to keep the collection together and reposited at a single repository. If that is not possible, keep both repositories informed of your actions so that the locations of the other part(s) of the collection can be recorded; this will assist researchers in locating the entire collection.

If you are unable to establish the landowner at time of collection from your project documents, you have some options left. If you suspect it was public or tribal lands, but can't say for certain, we recommend contacting the appropriate tribal or public land managers to see if they have records of the site. Absent that, they may have landownership maps where the site was located at the time of the collecting activity. If you suspect that it was from private lands, you can try searching county records to track down the owner.

3.2 LEGAL DOCUMENTATION

Repositories have many legal and ethical issues to consider before accepting a collection, including the following: Can valid title be transferred? Can all rights to ownership and future use be conveyed? Does the acquisition of the collection violate applicable state, federal, or international law? Is some or all of the collection subject to repatriation under NAGPRA? Is the collection free of all restrictions that would prevent the use of any part of the collection? Before you begin your discussion with a repository, be prepared with the following documents, if available:

3.2.1 Collecting permits

Archaeological permits are a requirement for projects conducted on public and tribal lands. If a collection in your care required a permit, a repository will request a copy of that permit in order to ensure that the collection was made legally and can be incorporated into its reposited collections.

3.2.2 Curation agreement

Curation agreements are an indication of an institution's commitment to provide long-term curation for the collected material. Depending on the time and circumstances under which the project was conducted, these agreements may have been made prior to collecting and often prior to the permit being issued. If there is a curation agreement among the associated records, the repository listed is the one you should be contacting. Note that just because there was a curation agreement at one time, there is no guarantee that the stated repository will accept the collection today. If there is no curation agreement, or the repository listed can no longer accommodate the collection, work with the federal or state agency responsible for the collection to identify a new repository.

3.2.3 Deed of Gift

If the collection is from private or tribal lands and the owner agreed to have the collection donated to a repository, you will need to present the written agreement, if available. Ideally this is a Deed of Gift but may also be a letter or other form of communication. Whatever format is used, it should contain the signature of the donor, a date, the name of the repository that the collection is intended for, and a note saying whether or not the gift is restricted. Generally restrictions on a gift are problematic, and may cause a repository to reject a collection.

If you do not have any documentation that indicates the owner's intent to donate, the original landowner or heirs will need to be contacted. The registrar of the intended repository will likely work with you to accomplish this.

3.2.4 International collections

The 1970 UNESCO <u>Convention on the Means</u> of Prohibiting and Preventing the Illicit Import, <u>Export and Transfer of Ownership of Cultural</u> <u>Property was ratified in 1972.</u> Collections made after that date could not be legally exported from signatory countries without an export certificate or other documentation which certifies that such exportation is not in violation of the laws of the country from which it was removed. This includes artifacts collected as part of a permitted archaeological project. International collections imported into the United States after 1983 also have to abide by the <u>Convention on Cultural Property</u> <u>Implementation Act.</u> If you are responsible for artifacts that were collected outside the United States, a repository will likely request all appropriate documentation indicating that the cultural property was exported legally. In working with a potential repository, it may be determined that the cultural property was a temporary export and must be returned to the originating country. Conversely, export documentation may indicate permission to transfer ownership to an individual or entity in the United States. If you have questions about any collection in your care, you can research multinational cultural heritage laws on the <u>UNESCO Database of</u> <u>National Cultural Heritage Laws.</u>

3.3 REPOSITORY CONSIDERATIONS

We suggest you treat each project as a discrete collection, as each will have legal implications that will need to be addressed separately. For example, artifacts and records generated from the excavation of a single site over multiple years constitute a single project and, therefore, a single collection. This collection should be kept together in one repository. If you do not have a curation agreement in place for collections made on public lands, or if you collected on private or tribal lands and did not predetermine a repository for the collection (with the permission of the landowner), you will need to identify the most appropriate place for the collection. The collections assessment provided in these guidelines will help you determine the best possible fit between the collection and a potential repository, or at least get you to a point where you can have a productive conversation with a potential repository.

3.3.1 Scope of Collections

A Scope of Collections document guides a repository's acquisition priorities. It states what kinds of collections will be accepted based on a

number of factors, including geographic region, collection type, and whether the incoming collection enhances the usefulness of the existing collection. However, just because a repository is located in a particular region does not mean that it will refuse collections from outside that region. University museums, in particular, curate faculty collections from around the world. In general, however, a repository in the same region where you made the collection will likely have a Scope of Collections that will meet your needs.

Not all repositories can accommodate every collection type. This essentially comes down to whether or not the collection can be adequately cared for and properly interpreted. Factors often considered by a repository might include the following: 1) Does it have the resources to adequately care for the collection in perpetuity? 2) Will objects require more conservation than the facility can afford to provide? 3) Will the collection likely be used for research, education, or exhibition? 4) Will the acquisition of the collection be positive or negative for the repository's public relations? For example, some archaeology repositories are hesitant to take historic collections because they often require vast amounts of storage space (which limits the ability to acquire additional collections) and require a curator who is knowledgeable in the regional history in order to properly interpret the collection. If the repository cannot accommodate the collection in your care, ask if they could recommend another that might.

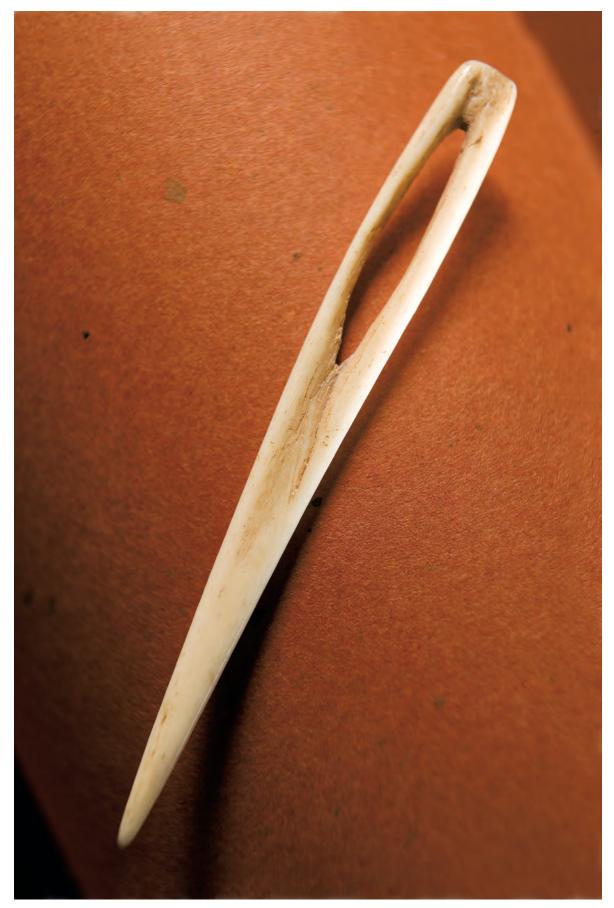
3.3.2 Collections from public lands

If any part of the collection is from federal or state lands, you will need to identify a repository that meets certain regulatory requirements. For federal collections, that would be a repository that complies with the standards set forth in 36CFR79.9. If a repository agreement is not already in place, you must work with the federal land-managing agency to identify which repositories they recommend or require. Collections from state lands are likely regulated by the SHPO or state museum of natural and/ or cultural history. This does not mean that the collections must be curated at the state museum, but that the state museum will want to know where state collections are being curated in order to ensure that they are being properly cared for and to maintain a state inventory. Therefore, the best place to start is with the state SHPO or museum. They will direct you to the most appropriate stateapproved repository for the collection.

3.3.3 Split collections

It is never a good idea to split collections derived from a single project. By split collections we mean situations in which objects from the same project are placed in separate repositories, or the objects and associated records are stored in separate places. Split collections make future research difficult and can result in a loss of context. Instances where you may find yourself having to deal with split collections are when there are multiple landowners on a project.

If the project was a federal or state undertaking, the federal or state land-managing agency will often take the lead. You should work with that designated agency to keep the collections intact. If the project was a research project, you will need to take the role of negotiator. For example, a collection may have artifacts from private, state, and federal lands. The default repository will be one that meets the criteria for federal collections. If a private landowner wants the artifacts from their land to go to their local museum, you should make every effort to convince them of the benefits of keeping the artifacts and records together. If you are unable to persuade the landowner, then be sure to make both repositories aware of the circumstances.



Bone needle., Fremont. Courtesy of Natural History Museum of Utah (UMNH), CM.98145



4.1 CURATION COSTS



Funding the rising costs of curation is one of the greatest challenges for caretakers of legacy collections and for repositories that agree to curate them. In some cases, the collections were generated prior to the time when repositories charged curation fees, or come from projects done in research contexts where there was no plan or possible source for curation costs. In other cases it was just assumed that the costs of curation would be borne by the museum or other repository at the institution where the investigator was employed. While we might wish that repositories were fully staffed and financially supported, this is not typically the case. Therefore, trying to secure funding to cover curation costs is an important reality for holders of legacy collections to consider.

In Section 2.3 we noted that the obligation to curate collections is the responsibility of the individual or entity that initiated the project. Responsibility for funding curation falls within that scope of obligation. For example, if you were a researcher collecting on public lands as part of a university-based project, you—not the public landowner—would be responsible for ensuring that you have sufficient funds to curate your legacy collections. In Section 4.2 we offer some funding opportunities that may be available to you.

In planning for curation funding, there are two main factors you must consider: curation fees and collections preparation costs.

4.1.1 Curation fees

Although the way in which repositories charge fees for curation vary, they are commonly calculated based on some standardized unit. That may be based on a per-box charge (using a standardized box size); by cubic or linear foot; on a notebook of hard copy associated records (forms, photographs,); on the number of oversized objects (whole ceramic vessels, large-scale maps, aerial photographs, etc.); or on file sizes, quantities, and types of information in digital form. Some repositories charge this fee only once while others may charge an annual fee, although the latter is typically negotiated with federal agencies. Be sure to understand what the repository's fees are before you design your budget.

Curation fees reflect the reality that when a repository accepts a collection, its staff are agreeing to provide the care needed to manage and preserve the collection. The fees include money to pay staff to inventory and/or catalog the collection and integrate it into their collections management system; to place the objects and documentation into acceptable storage facilities; to repackage and conserve items as deemed necessary; to maintain and upgrade computerized records management software and hardware; to purchase curation supplies and materials; and to make the collections available for researchers, visiting Native American communities, and the general public. Some portion of curation fees may also be used for upgrades in object and records storage as well as facility maintenance and security.

4.1.2 Collections preparation costs

In general, collections preparation costs include labor and supplies. Costs associated with preparing collections will vary considerably depending on the repository's requirements and the nature of the workforce you are able to secure. As will be discussed in greater detail in Section 5 (Preparing Collections for Curation), artifacts and records will need to be rehoused using archival materials, and this has an associated cost. Contrary to how creative you can get with your workforce, you cannot escape from paying for the requisite archival bags, boxes, and photo sleeves. Workforce, on the other hand, may or may not incur a cost; see Section 4.3 for labor options that you may not have considered before. Even if you manage to secure free labor, the calculations are helpful for estimating the overall project schedule.

4.1.3 Curation budgets

Before seeking funding for preparing collections for curation, you will need to budget what the project will cost. We suggest using the curation budget worksheets in Section 6.4 or contacting a friend in a Cultural Resource Management (CRM) firm. CRM firms may be a great resource because they prepare curation budgets for each project (so their calculation methods are current) and can offer advice for costs specific to your area. We suggest contacting two or three CRM firms for comparative purposes.

In general, costs can be calculated using the following formula: [hours to complete a task x labor rate] + [cost of supplies + supplies quantity] + [curation fees]. Given the large number of variables at play here, it is highly recommended that you calculate the curation costs for each collection individually. Some common tasks for artifact preparation include washing, labeling, cataloging, bagging, and creating bag tags. Some larger and/ or more fragile objects (e.g., ceramic vessels) will accrue higher labor and material costs. For records preparation there may be rehousing in archival sleeves and file folders, boxing, copying paper records, and reformatting digital files. Ask the repository if they would be willing to review your collection and make suggestions on the kinds of tasks you should expect to complete.

Processing collections is extremely labor-intensive and should be given careful consideration when budgeting the project. When calculating labor costs, it is a good idea to test in real time how long it takes to process collections and not rely on assumptions (the calculations we present here were fabricated to make a point). We also recommend you add 20% to

your total estimate as a contingency against issues that can delay processing.

CALCULATING CURATION LABOR COSTS

Try these methods below or use one of your own.

Option I

One option is to (1) identify the tasks, (2) calculate time to complete task \times labor costs, and (3) estimate number of artifacts, ecofacts, and associated records per task.

Another option is to (1) calculate the number of artifacts that can be processed on an hourly basis for all tasks, (2) calculate how many hours it will take based on the number of artifacts, and (3) multiply this number by labor cost per hour.

Option 2

- Labeling artifacts: 10 minutes per artifact
- Labor: \$12.50/hour
- 500 artifacts x 10 minutes/artifact = 83 hours

83 hours x \$12.50/hour = \$1,037.50

- Washing, cataloging, labeling, and bagging chipped stone artifacts:
 6 artifacts per hour
- Labor: \$12.50/hour
- 500 artifacts = 83 hours

83 hours x \$12.50/hour = \$1,037.50





4.2 FUNDING CURATION

There are several sources of possible funding for curating legacy collections, and the history and nature of particular projects may suggest prioritizing one or more of those sources. Discussion of possibilities for curation funding and advice about how to proceed might best be initiated with the museum or repository chosen for the collection. However, sources of potential funding for curation may vary, depending on the context within which the research was done.

4.2.1 State and federal grants

If the project was conducted on public lands, funding from municipal/state/federal agencies might be sought. Municipal and state-level agencies will of course vary in their organizational position and mission, but possible points of initial contact might include the SHPO, State Archaeologist, cultural preservation division or similar entity, or state museum. Conversations with representatives of these entities may help to identify particular programs that may fund proposals for curation. If the collection was generated from work on land controlled by a state agency, the particular agency state land office, for example—may be approached. Also, municipal agencies should be considered as well.

The federal government is another possible source of funding for curation. If the collection happens to come from federal land, the land-managing agency—Bureau of Land Management, National Park Service, Forest Service, Department of Defense, etc.—might be contacted for assistance. Other federal entities, in particular the Institute of Museum and Library Services (IMLS), has supported such efforts in the past. Other agencies that might also be approached include the National Endowment for the Humanities (NEH). If the collection was the product of a CRM project conducted on behalf of a state or federal entity, there may be a stronger basis to discuss possible funding for curation with financial support from that entity, depending on the original contract.

4.2.2 Corporate philanthropy and private foundations

Corporations typically have philanthropic offices that donate money in support of a variety of causes. Inquiries to corporations about their priorities in giving may produce funds to cover curation costs. Corporations that target state-level or local-level donations may be worth contacting first.

Like corporations, private philanthropic foundations may also be a source of funds, depending upon their missions and priorities. National nonprofit organizations such as The Archaeological Conservancy might be approached.

Curation funds for legacy collections created from work on private land may be more likely to be granted by corporations or philanthropic foundations.

4.2.3 University or college support

Universities or colleges may be in a position to provide financial support for curation of legacy collections. This may be more likely if the legacy collection was originally generated by university- or college-supported investigations by former faculty, staff, and/or students. If the academic institution also has a repository, chances are that curation fees will be waived.

If the project was conducted under a partnership between a governmental land-managing agency and the university or college, it might be worth considering an approach to both members of the partnership. Private-sector CRM firms are less likely to be successful in gaining university/college support for their collections.

4.3 WORKFORCE FOR PREPARING COLLECTIONS

The costs of curating legacy collections can sometimes be reduced by considering alternatives to the use of permanent museum staff. Permanent staff members are generally fully occupied with job responsibilities, so taking on additional work associated with legacy collections may not be realistic.

Possible alternatives include using volunteer or student labor, or by personally undertaking some of the necessary curation tasks. Caretakers of legacy collections and repositories should discuss these possibilities in order to create a viable plan for the incorporation of the collection into the museum or facility.

4.3.1 Volunteer labor

Many fundamental curation tasks can be completed by volunteers working under the supervision of a facility staff member and in collaboration with the donor of the legacy collection. Volunteers may be sought in the local community, perhaps by prioritizing local avocational archaeological organizations as well as any existing museum volunteer groups. If the legacy collection needs basic processing (washing objects, repackaging them, labeling them, etc.), such tasks may be completed effectively by volunteers.

4.3.2 Student labor =

If the curation facility is associated with a college or university, student labor may be another alternative. Students might be involved as volunteers, but more beneficial options could also include students participating in class-related training projects, or being paid a modest wage through work-study or internship programs. Students may have computer skills that would be suitable for other curation tasks.



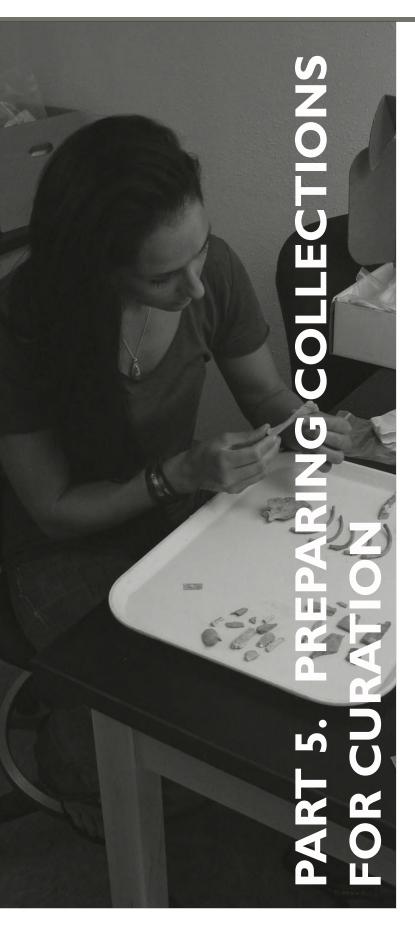
4.3.3 Repository labor -

Staff employed at repositories possess the requisite knowledge to complete all of the necessary tasks associated with legacy collections. If the collection is going to be reposited at their facility, they may be willing to process your collection for a fee.





Cotton skein, San Juan Branch Puebloan. Courtesy of Natural History Museum of Utah (UMNH), CM.89272



5.1 PROCESSING COLLECTIONS



It is possible that collections made years ago will not be up to current curation standards. If that is the case with the collections, then having a conversation with a potential repository is an important first step. Such discussions may result in a long-term agreement and a plan to bring the collections up to standards. Temporary work and secure storage space may be available within the repository, as may other forms of assistance.

One of the more challenging aspects of curation preparation is that there is no single standard. While all repositories strive to follow best practices, there are many ways to accomplish this. The result is a myriad of guidelines to navigate. This is why it is critical that you do not begin preparing collections until you have identified the repository and they have agreed to take the collections. To proceed with processing prior to completing these important steps will result in an extraordinary waste of time and money. In fact, it is in your best interest to talk with the repository's collection manager to better understand their guidelines before you sign a curation agreement. Do not enter into an agreement with a repository if you cannot meet their standards.

Each preparation task discussed below is provided to give you a general idea of what to expect, but is not necessarily what you will be asked to do. The collection manager will provide you with specific guidelines, which you should follow carefully. If you find that the repository where you are directed to send the collections (i.e., per the directive of a private landowner) does not require the minimum standards described below, consider reviewing the collection management resources in Section 6 for a more in-depth study. It is in your best interest to preserve the results of the project for future use. Utilizing appropriate materials and best practices is a step in the right direction.

5.1.1 Artifact catalog

Beginning with a field specimen catalog (assuming one exists), create an artifact catalog of each artifact or groups of artifacts in the collection. The manner in which collections are cataloged is contingent upon the level of detail the repository requires. Some repositories require that each artifact be assigned a number, while others are content with artifact lots. The collection manager will lead you through their system and may even be willing to make adjustments to accommodate your special circumstances.

You should not label archival bags or individual artifacts without first setting up the artifact catalog. Typically done in spreadsheet format from the field catalog or other records, this will facilitate processing and prevent any mislabeling or double numbering, which is time-consuming to correct.

5.1.2 Labeling artifacts

Labeling of artifacts may be the most tedious of all the processing tasks, but it is also the most critical. The primary goal in labeling artifacts is to provide a link between the object and its provenience. Without it, objects may become dissociated from their site and/or project, rendering them almost useless as a research collection. Knowing this, it may seem counterintuitive that a repository would want artifact labels to be reversible (i.e., they can be removed and changed), but it is necessary for correcting errors.

The two main methods for labeling objects are direct application and indirect application. The latter is the least desirable way of marking objects because the data can be more easily dissociated from the object. Examples include labeling bags/boxes/vials of objects (e.g., debitage, soil samples, seed vials) or a loose tag inside a bag. Regardless, there are times when this method is the only option.

Direct application includes labeling the object with pencil or ink, applying a typed or barcoded label with adhesives, and attaching a label. Labeling with ink is the most common method for inorganic objects. The process involves inking an identifying number sandwiched between two barrier coats. The ink and the barrier coats must be archival; avoid common ink and never use nail polish or Wite-Out® on the artifacts.



Printed or barcoded labels affixed to an artifact is another form of direct application; this method tends to be faster and easier to read than hand labeling with ink. Attaching a label is used for artifacts that cannot—or should not—have markings directly applied to the surface, such as some plant material objects, friable objects, and leather objects. Typically composed of an acid-free tag looped around the object with a cotton string, a label attachment is the least secure form of direct application. The collection manager should supply you with a list of approved methods and materials as well as guidance on how best to label particular objects.

5.1.3 Housing and packing artifacts

Repositories must efficiently manage their space and will often dictate the types of standard enclosures in which the collections must be packed. For example, standard size archival boxes will likely be required. Within those boxes, artifacts may be bagged or placed in smaller boxes. Artifact classes housed in this manner are often chipped stone, ground stone, ceramics, unworked perishable material, and soil/ pollen/charcoal samples.



The collection manager will instruct you on how to pack the collections, but there are some general rules you may be asked to follow: organics and inorganics should be boxed separately; large, heavy objects should not be boxed with smaller, fragile objects; if heavy and fragile objects must go in the same box, always place heavy objects on the bottom and separate with padded interior boxes or shelves to prevent damage to the more fragile objects; place ground stone in closeable plastic bags to prevent cross-contamination; and always place a paper label inside every bag ("permanent" marker on plastic bags rubs off over time). Also, if you have to pack fragile or vulnerable objects, such as whole ceramic vessels, basketry fragments, unfired clay, etc., consult with the collection manager for advice. The few minutes you spend in consultation could prevent objects from being damaged.

5.1.4 Archival materials for artifacts

The ultimate goal of repositories is to maintain the physical integrity of artifacts and their associated records "in perpetuity" for future research and exhibition. Much of their ability to accomplish this relies on controlling the interior environment, including a good security system, mitigating environmental hazards in storage areas, and the use of archival-quality materials. Ensuring that all materials used are archival will inhibit acids and other harmful substances from reacting with artifacts and associated records. This is especially concerning for any object made from organic material. There are several conservation supply companies (see Section 6, Reference Material) that repositories use and recommend.



One of the more common terms you will hear is acid-free materials. These are materials that have a pH of 7.0 to 8.5. Another quality of archival materials is that they are lignin-free, which means they are made from wood pulp that is chemically purified to remove lignin and other damaging impurities. Paper products can also be buffered or unbuffered. Buffered enclosures have an alkaline reserve that protects objects against migrating acids. Original associated records, which are highly acidic, and plant-based artifacts benefit from the use of buffered housing materials. In contrast, unbuffered paper is necessary for animal-based artifacts, metal artifacts, and any paper product that comes in contact with traditional (i.e., not born-digital) print photographs and slides.

Plastic bags with closeable tops are commonly used for housing many artifact types. There are three types of plastics that meet archival standards: polypropylene, polyethylene, and polyester. Do not use any other type of plastic enclosure due to the damaging by-products that they emit, which can accelerate the breakdown of artifacts. Photographs and slides can also be housed in plastic enclosures as long as the enclosure is made from one of the above approved plastics and has passed the Photographic Activity Test (PAT).

Collections that are between the field and the repository are often packed and boxed in materials that do not meet minimum archival standards. Be aware of the following materials to avoid and which should be discarded as you prepare the collections: cotton or wool batting, acidic cardboard, metal fasteners (e.g., paper clips and staples), rubber bands, newspaper, packing peanuts of any kind, and most soft foam products (e.g., polyurethane, etc.). If you are unsure if the material meets archival standards it is best to replace it. An exception to this rule is for the associated records, which were likely written on acidic paper. Many repositories will accept them as is, as long as they are enclosed in archival housing, but some may ask you to copy them onto acid-free paper. The collection manager will work with you to identify the best solution for your project.

5.1.5 Associated Records

Associated records are just as much a part of an archaeological collection as the artifacts and will be required by the repository. Not every document (e.g., receipts, e-mails, etc.) generated will be

wanted by the repository, so it is important that you work with the collection manager to identify which kinds of documents to retain and which to cull. In general, the kinds of data important to a repository will be administrative (e.g., permits and a description of your field numbering system), fieldwork (e.g., survey forms, excavation notes, maps, and photographs), and post-fieldwork paperwork (e.g., lab analysis and reports). Note that documents not wanted by the repository may be wanted by an archive.

If the records were generated prior to the mid- to late 1990s, chances are they are on acidic paper and the images are in analog format (i.e., c-prints, blackand-white prints, and slides). Most repositories will accept these formats as long as they are prepared with archival materials (see above). If you decide to digitize the collection, or if part of the collection is born-digital, there are specific file types you may be asked to provide for text, datasets, raster-based images (e.g., photographs), or vector-based images (e.g., maps). In addition to formatting requirements, the collection manager may ask you to use their digital-file naming system. Some facilities are also able to accept GIS data.

Not all repositories will accept digital files in lieu of a paper record, so work closely with the designated repository to ensure that you are meeting their specific requirements.

While paper records (e.g., site forms) are typically not labeled, photograph prints, slides, and negatives must be labeled in case they are separated from the rest of the collection. The photograph label may include information such as the site number, the photo number, and the accession number or year the photograph was taken, depending on the repository requirements. Photographs and slides can be labeled with a special film-marking pen (for plastic-coated mounts) or a #3 (HB) or #4 (HH) pencil (for paper mounts) to prevent bleeding or loss of information in the event of water damage.

5.2 HUMAN REMAINS

5.2.1 Overview

The inclusion of human remains and/or associated funerary objects in a collection can be a difficult situation to navigate. Circumstances in which you might find yourself responsible for human remains may include the following: a collection was made on a project on which you served as the Principal Investigator; the remains and associated funerary objects were given to you or your institution by someone else; or the remains may be a subset from an old research project (e.g., isotope analysis). Not all human remains are subject to the Native American Graves Protection and Repatriation Act (NAGPRA), and a repository may or may not be able (or willing) to accept human remains.

If the human remains are Native American or Native Hawaiian, they may be subject to NAGPRA (25 U.S.C. 3001) and its implementing regulations (43CFR10). If you are unsure of the biological identity of the human remains in your care, we highly recommend you work with a physical anthropologist to make that determination. If they are found to be non-Native American or non-Native Hawaiian, a letter from a physical anthropologist will be a welcomed assurance to a potential repository.

NAGPRA is restricted to the continental United States, Alaska, and Hawaii. NAGPRA does not cover human remains from US territories (e.g., American Samoa), countries other than the United States, or any remains from non-Native Americans or non-Native Hawaiians. Eligibility is also contingent on the landowner at time of collection. Many states have laws that mimic NAGPRA to regulate human remains from state, and sometimes private, lands. If the human remains are regulated by NAGPRA or similar state laws, a repository may not accept them into their collections, but you have other options. This section will walk you through each possible scenario.

5.2.2 Disposition scenarios

If human remains and/or associated funerary objects were collected after November 16, 1990, from federal lands or within the exterior boundaries of tribal lands, they fall under Section 3 of NAGPRA, which has very specific regulations that dictate the disposition of those remains. You will need to contact the federal land-managing agency or Tribal Historic Preservation Office (THPO) to determine final disposition.

If human remains and/or associated funerary objects were collected after November 16, 1990, from state or private lands, you should begin with the SHPO or State Archaeologist to determine the best course of action. Most, if not all, states have regulations pertaining to human remains recovered on state and private lands. These often have a start date (just like NAGPRA), but will vary from state to state. The SHPO or State Archaeologist will likely be responsible for determining the disposition of the remains.

If you have Native American or Native Hawaiian human remains that were collected before November 16, 1990, from federal lands or within the exterior boundaries of tribal lands, and you had a curation agreement in place, you should start a conversation with that repository and the federal or tribal (if collected from 1979 to 1990) agency. Even if the repository does not accept the NAGPRA collection, it will likely work with you and the federal agency or THPO to find the best possible solution. If you do not have a curation agreement in place, then you should speak directly with the appropriate land-managing agency, THPO, or BIA agent.

If human remains and/or associated funerary objects were collected before November 16, 1990, from state or private lands, you are in a similar situation as above, with the only difference being that you should work with the SHPO or State Archaeologist. Even if a state does not have laws pertaining to human remains from private property, they may be willing to assist you with the final disposition of the individual(s). States that have current laws regarding human remains from private lands may be willing to retroactively apply those laws in order to assist you with a final disposition. Native American consultation will likely follow from your initial contact with the state agency. You will probably not take the lead, but may be asked to participate in repatriation discussions.

5.2.3 Research specimens

Biological analyses of human remains typically begin with a researcher taking a sample from an individual in a museum-curated collection. As a result, human bone fragments and tissue samples that were not exhausted in experiments continue to be stored in laboratories around the United States. **It is not appropriate to discard these samples.** Instead, identify the repository where the remains of that individual are curated. If the individual has not been repatriated, the facility will take the sample back. Conversely, if you have a sample from an individual that has been repatriated, the repository or agency should work with the culturally affiliated tribe on your behalf to determine the best possible disposition of the sample.

5.2.4 Non-NAGPRA human remains

Only Native American or Native Hawaiian individuals are subject to NAGPRA and state repatriation laws. If you are the caretaker of human remains from permitted excavations that you know do not meet this important criterion, then you will want to start a conversation with the landowner, whether that is federal, state, tribal, or private to determine final disposition. It may be decided that the remains should be reburied or perhaps go with the rest of the collection to a repository. Keep in mind that some repositories will not be able to accept the collection because they cannot properly curate human remains or they do not meet their Scope of Collections. You should make every effort to keep the collection together.

Human remains from countries outside the United States are not subject to NAGPRA, but are subject to UNESCO laws and, as such, should be treated like any other international collection.



6.1 REFERENCE MATERIAL



General Curation

Childs, S. Terry, editor

2004 Our Collective Responsibility: The Ethics and Practice of Archaeological Collections Stewardship. Society for American Archaeology, Washington, DC.

Childs, S. Terry, and Danielle M. Benden

2017 A Checklist for Sustainable Management of Archaeological Collections. *Advances in Archaeological Practice* 5: 12–25.

Knoll, Michelle, Jenna Domeischel, Heather Thakar, Janaki Krishna, and Bruce Huckell

2016 Archaeologists Anonymous: The Twelve-Step Program to Getting Those Old Collections Curated. *The SAA Archaeological Record* 16(3): 25–32.

MacFarland, Kathryn, and Arthur W. Vokes

2016 Dusting off the Data: Curating and Rehabilitating Archaeological Legacy and Orphaned Collections *Advances in Archaeological Practice* 4: 161–175.

Sullivan, Lynne P., and S. Terry Childs

2003 Curating Archaeological Collections: From the Field to the Repository. Archaeologist's Toolkit, Volume 6. AltaMira Press, Walnut Creek, California.

Collections Preparation

Drew, Natalie M.

2004 Preserving Archaeological Associated Records. In Our Collective Responsibility: The Ethics and Practice of Archaeological Stewardship, edited by S. Terry Childs, pp. 55-66. Society for American Archaeology, Washington, DC.

Johnston, Tamara, Robin Meador-Woodruff, and Terry Segal

2010 Marking. In *Museum Registration Methods*, 5th Edition, edited by Rebecca A. Buck and Jean Allman Gilmore, pp. 233–275. AAM Press, Washington, DC.

Kilby, Virginia

1995 Buffered and Unbuffered Storage Materials. Conserve O Gram, National Park Service, No. 4/9.

National Park Service

Museum Handbook: Part 1, Museum Collections https://www.nps.gov/museum/publications/MHI/ mushbkI.html

Conserve O Gram Series

https://www.nps.gov/museum/publications/ conserveogram/cons_toc.html

Digital Standards

Brin, Adam, Francis P. McManamon, and Kieron Niven (editors)

2013 Caring for Digital Data in Archaeology: A Guide to Good Practice. Oxbow Books, Oxford.

Curation Budgets

Childs, S. Terry, Karolyn Kinsey, and Seth Kagan

2010 Repository Fees for Archaeological Collections. *Heritage Management* 3:189– 212.

Drew, Natalie M.

2010 Curating Associated Records. *Heritage Management* 3:275–290.

Majewski, Teresita

- 2010 Not Just the End Game Anymore: A Perspective from the Western United States on Proactive Budgeting for Project Curation Needs in a Changing Archaeological World. *Heritage Management* 3:167–188.
- Sonderman, Robert C.
 - 2004 Before You Start That Project, Do You Know What to Do with the Collection? In Our Collective Responsibility: The Ethics and Practice of Archaeological Collections Stewardship, edited by S. Terry Childs, pp. 107–120. Society for American Archaeology, Washington, DC.

6.2 RESOURCE SUPPLIERS

Carr McLean

1-800-268-2123

http://www.carrmclean.ca/ CategoryGroupBrowser.aspx?CategoryID=132

Conservation Resources International 1-800-634-6932 http://www.conservationresources.com

Gaylord Archival

1-800-448-6160

http://www.gaylord.com

Hollinger Metal Edge, Inc. 1-800-862-2228 http://www.hollingermetaledge.com Light Impressions 1-844-656-4876 http://www.lightimpressionsdirect.com

Print File, Inc. 1-800-508-8539 http://www.printfile.com

Talas 212-219-0770 http://www.talasonline.com

University Products 1-800-628-1912 http://www.universityproducts.com

Uline (note: not all products are archival) 1-800-295-5510 <u>http://www.uline.com</u>

6.3 CURATION CHECKLIST

Project Name:

Project Stage	Guidelines Reference	Action	Complete
Planning	1.2.1	Separate collections by project	
	1.2.2	Complete collections assessment	
	3.2	Gather all legal documents such as permits, Deed of Gift, contracts, export documentation, etc.	
	3.3	Select an appropriate repository for each collection	
Budget & Funding	4.1.3	Develop a budget for collections preparation and curation fees	
	4.2	Secure funding for curation costs	
Collections Preparation	5.1.2, 5.1.3	Label and rehouse all artifacts according to the repository's guidelines	
	5.1.5	Prepare all associated records and legal documents according to the repository's guidelines	
Submit		Set up date to reposit collections	
Collections		Submit collections and associated records to repository	
		Enjoy your retirement!	

Curation Fees Worksheet

Number of Artifact Boxes	x	Fee/box	:	Total Cost
			\downarrow \downarrow	
Number of Document Boxes	x	Fee/box	:	Total Cost
Number of Oversized Boxes	x	Fee/box	:	Total Cost
Other fees				Total Cost
			+	
Total Curation Costs				

Worksheet
Preparation
Curation

Task	Time to complete	×	Unit	Total Time	×	Cost of labor	 Total Cost
			(object/group)				
e.g., wash lithics	10 mi/20 objects		4,000 objects	33.3 hours		\$12.50/hour	\$416
Total Preparation Costs							

Table 1. Average costs of supplies	costs of supplies	Table 2	. Average time	e to process 1 lir	Table 2. Average time to process 1 linear foot of record formats (Drew 2010)	d formats (Dre	w 2010)
for record formats (Drew 2010)	s (Drew 2010)						
Record Format	Supply cost/linear foot	No. of tasks	Paper	Photo	Audiovisual	Digital	Oversized
Paper	\$110		4 hours	20 hours	2 hours	16 hours	4 hours
Photographic	\$600	2	8 hours	28 hours	4 hours	20 hours	15 hours
Audiovisual	\$225	ſ	12 hours	36 hours	6 hours	28 hours	20 hours
Digital	\$50	4	16 hours	44 hours	8 hours	36 hours	25 hours
Oversized	\$480	ъ	20 hours	52 hours	10 hours	44 hours	30 hours
Formula [(Hours from Table	Formula [(Hours from Table 2 × Labor rate) + (Supply cost	cost from Table 1)] x how much material	x how much n	naterial			
list of associated records tasks	records tasks						
e.g., type site forms	JS						
					I		
					I		
					I		
					I		
					I		

Photo Credits

Cover (left): Projectile point, Archaic period. Courtesy of Natural History Museum of Utah (UMNH), CM.143937.

Cover (middle): 1975 excavation at 42WN420 (Cowboy Cave). Courtesy of UMNH.

Cover (right): Bone whistle, Fremont. Courtesy of UMNH, CM.61150

p.1 (main image): Scottsbluff point from southwestern North Dakota. Photo by Dick Melvin of Beach, North Dakota.

p.1 (inset): Evaluating a collection of flaked stone artifacts from south-central New Mexico. Photo by Bruce Huckell.

- p.9 (main image): Collections room at the Natural History Museum of Utah. Photo by Michelle Knoll.
- p.9 (inset): Storage unit for perishable artifacts. Photo by Michelle Knoll.
- p.13 (main image): Archaeological permit from 1953. Photo by Michelle Knoll.
- p.13 (inset): 1968 excavations at 42IN124 (Median Village). Courtesy of UMNH.
- p.19 (main image): Exterior of the Natural History Museum of Utah. Courtesy of UMNH.
- p.19 (inset): Storage unit for ceramic artifacts. Photo by Michelle Knoll.
- p.21 (left): Labeling artifacts. Photo by Michelle Knoll.
- p.21 (right): Storage enclosures for lithic collections. Photo by Michelle Knoll.
- p.23 (top): Volunteers and staff rehousing collections into archival enclosures. Photo by Michelle Knoll.
- p.23 (middle): Student labeling artifacts. Photo by Michelle Knoll.
- p.23 (bottom): Staff at the Natural History Museum of Utah. Photo by Michelle Knoll.

p.25 (main image): Analyzing faunal remains from an Ancestral Pueblo site in northern New Mexico. Photo by Bruce Huckell.

- p.25 (inset): Volunteers and staff rehousing collections into archival enclosures. Photo by Michelle Knoll.
- p.26 (inset): Examples of archival labeling products. Photo by Michelle Knoll.
- p.27 (left): Correctly packed box. Photo by Michelle Knoll.
- p.27 (right): Examples of archival products. Photo by Michelle Knoll.
- p.31 (main image): Library at the Natural History Museum of Utah. Photo by Michelle Knoll.