

**COUNCIL OF TEXAS ARCHEOLOGISTS
GUIDELINES AND STANDARDS FOR CURATION**

**Prepared by the Council of Texas Archeologists Curation Committee
September 2010 – March 2011**

(2011-03-03 NL)

**COUNCIL OF TEXAS ARCHEOLOGISTS
GUIDELINES AND STANDARDS FOR CURATION**

Table of Contents

1.	Introduction.....	1
1.1	Authority.....	2
1.1.1	Federal Laws.....	2
1.1.2	Texas State Rules, Regulations, and Codes.....	4
1.2	Applicability.....	5
1.3	Definitions.....	5
2.	Guidelines for Submitting Collections for Curation.....	14
2.1	Arranging for Curation with an Archeological Repository.....	14
2.1.1	Choice of Archeological Repository.....	14
2.1.2	Letter of Request for Housing.....	14
2.1.3	Provisional Housing Agreement.....	14
2.1.4	Letter of Transfer/Ownership.....	14
2.1.5	Letter of Acceptance.....	15
2.2	Standards for Preparing Archeological Records.....	15
2.3	Standards for Preparing Material Collections.....	16
2.3.1	Biological Attack.....	16
2.3.2	Cleaning.....	16
2.3.3	Labeling.....	17
2.3.4	Packaging.....	17
2.3.5	Conservation.....	18
2.4	Checklist for Submitting Archeological Material Collections.....	19
3.	Standards for the Archeological Repository.....	21
3.1	Characteristics of a Certified Curatorial Facility.....	21
4.	Guidelines for Treatment of Human Remains.....	22
4.1	Respectful Treatment, Handling, and Curation during Temporary and/or Long Term Housing of Human Remains and Associated Funerary Objects.....	22
4.1.1	Cleaning.....	22
4.1.2	Drying.....	22
4.1.3	Cataloging and Labeling.....	22
4.1.4	Packaging.....	22

COUNCIL OF TEXAS ARCHEOLOGISTS GUIDELINES AND STANDARDS FOR CURATION

The Council of Texas Archeologists Curation Committee and its predecessors have a long history in developing curatorial standards. This document replaces the *Council of Texas Archeologists Guidelines for Curation Standards and Procedures* as amended. Professional archeologists can refer to these updated guidelines when preparing and organizing archeological research collections for long-term curation.

1. INTRODUCTION

Archeological sites are unique, destructible, and nonrenewable cultural resources. The mode of investigation often results in their partial or total destruction. The archeological record contains: (1) materials (i.e., artifacts, samples); (2) associated documentation (e.g., permits, field/laboratory records, photographs, reports); and (3) records only (i.e., permits, field notes, photographs, reports assembled for no-collection surveys). They become the data sources for both present and future. Accordingly, it is necessary to systematically document, process (e.g., clean, label), inventory, use, and permanently house these collections in perpetuity. Selecting a museum or repository [herein repository] to provide professional, systematic, and accountable curatorial services on a permanent basis should be of utmost concern and consideration to all members of the archeological community.

Archeologists working on projects/research are encouraged to integrate these guidelines into project budgets, schedules, and personnel requirements. Repositories are also encouraged to refer to these guidelines when considering institutional staff and policy development, long range planning, and physical plant modification/expansion.

When a qualified archeologist conducts a prehistoric or historic resource survey, excavation, or other study, the collection strategy should be stated in the research design and approved by the lead agency responsible for the enforcement of environmental laws and regulations in consultation with the Curator or Collections Manager of the selected repository. The research design should be governed by a field collection strategy that addresses the management and research goals of the project, the types of materials to be collected and curated, and a systematic sampling that is acceptable to the principal investigator, review agencies, and recipient repository. Each field collection strategy should also be periodically reviewed so that future needs can be considered. As a minimum, the field collection strategy should include provisions that a representative sample of all classes of cultural materials should be retained unless there is an overarching concern (e.g., health risk, repatriation of human burial remains to culturally affiliated groups, or impracticality of stabilization). Complete finished objects are generally rare and should receive high priority for research and interpretive display. Fragmentary objects with diagnostic attributes (e.g., patterns, complete dimensions, temporal attributes, stylistic attributes, makers' marks, use-wear marks, etc.) are important for comparative analysis and should generally be saved. Material with residues, chemicals, or elements potentially useful for future studies should be considered for retention.

When cultural materials are encountered as the result of a prehistoric or historic resource survey, excavation, or other study, archival procedures must be followed and decisions must be made by qualified archeologists as to what must be recorded, discarded, or saved for a permanent collection. When eliminating material, archeologists may have to consider hazards to health and safety, deterioration of material beyond its ability to be preserved, importance for scientific research, heritage appreciation, educational value, or its age being too recent to qualify as historical. [This could lead to us not curating materials at one point so that when they would be considered historical, we don't have them. I would prefer a statement that suggests sampling and not wholesale disposal of "recent" materials.] Such decisions also must consider practical factors, such as weighing the costs of curation against the present and potential heritage and research values of the

collections. As it is extremely difficult to predict the potential for research, a conservative approach is recommended.

What amounts and percentages of materials should be saved? Considerations should include heritage values, future research potential, sampling theory, and practical storage limits. Can organic and metallic materials survive untreated, or will they require conservation treatment? If treatment is required, what type of treatment is appropriate and at what cost? If treatment cannot be assured, then all reasonable efforts should be taken to document the material attributes. Conservation measures for initial preservation should be completed before acquisition by the permanent repository, as part of the project proposal costs. Permanent conservation and maintenance measures are the responsibility of the repository.

Recordation practices and procedures should be coordinated with the Curator or Collections Manager and included in the archeological budget. Of particular concern should be the following:

1. All paper products used for field notes, catalogs, labels, tags, and reports should be of archival quality.
2. Where curated, electronic records should be compatible with the repository's computerized database management system(s).
3. Photographs should be archivally processed and placed in archival holders.

Identifying labels and/or numbers should be affixed to each artifact with reversible but stable archival materials whenever feasible. For example, it is noted that some organic materials are not suitable for direct labeling.

When preparing a collection for curation following field investigations, further consultation with repository staff may be necessary in order to better preserve the nature of the cultural resource in its variance from what was discussed in the research design. Such considerations might be concerns of culturally affiliated groups, emergency discoveries in the field, and other factors.

1.1 Authority

These guidelines are written to supplement, not supersede, state and federal historic preservation or environmental laws, regulations, and guidelines.

1.1.1 Federal Laws

Antiquities Act of 1906 provides for the protection of historic, prehistoric, and scientific features located on federal lands. It authorizes the President to designate as National Monuments historic and natural resources of national significance located on federally owned or controlled land. The Secretaries of the Interior, Agriculture, and Defense are authorized to issue permits for archeological investigations on lands under their control to recognized educational and scientific institutions for the purpose of systematically and professionally gathering data of scientific value.

<http://www.cr.nps.gov/local-law/anti1906.htm>

<http://www.nps.gov/archeology/tools/laws/AntAct.htm>

National Park Service Act of 1916 establishes the National Park Service to manage our nation's parks and to "conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such a manner and by such a means as will leave them unimpaired for the enjoyment of future generations."

<http://www.nps.gov/legacy/organic-act.htm>

National Historic Preservation Act of 1966, as amended, establishes a program for the preservation of historic properties throughout the United States. It created the National Register of Historic Places, State Historic Preservation Offices, and the Section 106 Review Process.

http://www.nps.gov/history/local-law/FHPL_HistPrsrvt.pdf

<http://www.nps.gov/archeology/tools/laws/NHPA.htm>

Historic Sites Act of 1935 establishes as a national policy preservation for public use of historic sites, buildings, and objects. This act led to the eventual establishment within the National Park Service of the Historic Sites Survey, the Historic American Building Survey (HABS), the Historic American Engineering Record (HAER), and the National Historic Landmarks Program.

http://www.nps.gov/history/local-law/FHPL_HistSites.pdf

Curation of Federally-Owned and Administered Archeological Collections (36CFR Part 79)

<http://www.nps.gov/archeology/tools/laws/36CFR79.htm> <http://www.nps.gov/archeology/tools/36CFR79.htm>

http://www.nps.gov/archeology/collections/laws_04.htm

Reservoir Salvage Act of 1960 provides for the recovery and preservation of "historical and archaeological data (including relics and specimens)" that might be lost or destroyed in the construction of dams and reservoirs.

http://www.cr.nps.gov/local-law/fhpl_archhistpres.pdf

Department of Transportation Act of 1966, Section 4(f) states that the Secretary of Transportation shall cooperate and consult with the Secretaries of the Interior, Housing and Urban Development, and Agriculture, and with the States in developing transportation plans and programs that include measures to maintain or enhance the natural beauty of the lands traversed. The Secretary of Transportation shall not approve any program or project that requires the use of land from a public park, recreation area, wildlife and waterfowl refuge, or historic site unless there is no feasible and prudent alternative.

http://www.cr.nps.gov/local-law/fhpl_dotact.pdf

National Environmental Policy Act of 1969 declares that it is a federal policy to "preserve important historic, cultural, and natural aspects of our national heritage. It requires federal agencies to use a systematic and interdisciplinary approach that incorporates the natural and social sciences in any planning and decision making that may impact our environment.

http://www.cr.nps.gov/local-law/fhpl_ntlenvirmpolcy.pdf

<http://www.nps.gov/archeology/tools/laws/AHPA.htm>

Archaeological and Historic Preservation Act of 1974 amends the 1960 Reservoir Salvage Act by providing for the preservation of significant scientific, prehistoric, historic and archeological materials and data that might be lost or destroyed as a result of flooding, the construction of access roads, relocation of railroads and highways, or any other federally-funded activity that is associated with the construction of a dam or reservoir.

http://www.cr.nps.gov/local-law/FHPL_ArchHistPres.pdf

American Indian Religious Freedom Act of 1978 states that it is a policy of the United States to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian, Eskimo, Aleut, and Native Hawaiians, including but not limited to access to sites, use and possession of sacred objects, and the freedom to worship through ceremonial and traditional rites.

http://www.nps.gov/history/local-law/FHPL_IndianRelFreAct.pdf

Archaeological Resources Protection Act of 1979 defines archeological resources as any material remains of past human life or activities that are of archeological interest and at least 100 years old, requires federal permits for their excavation or removal and sets penalties for violators.

http://www.nps.gov/history/local-law/FHPL_ArchRsrcsProt.pdf

<http://www.nps.gov/archeology/tools/laws/ARPA.htm>

Abandoned Shipwreck Act of 1987 asserts United States Government ownership of three categories of abandoned shipwrecks: those embedded in a state's submerged lands; those embedded in coral formations that are protected by a state; and those located on a state's lands that are included or are eligible for inclusion in the National Register of Historic Places. The law then transfers title for most of the shipwrecks to the respective states and stipulates that states develop policies to protect the shipwrecks.

http://www.nps.gov/history/local-law/FHPL_AbndShipwreck.pdf

<http://www.nps.gov/archeology/tools/laws/ASA.htm>

Native American Graves Protection and Repatriation Act of 1990 gives ownership and control of Native American human remains, funerary objects, sacred objects and objects of cultural patrimony that are excavated or discovered on federal land to federally-recognized American Indian tribes or Native Hawaiian organizations. The law also establishes criminal penalties for trafficking in human remains or cultural objects, and requires agencies and museums that receive federal funding to inventory those items in their possession, identify any descendants, and consult with appropriate tribes about repatriation.

<http://www.cr.nps.gov/nagpra/MANDATES/25USC3001etseq.htm>

<http://www.nps.gov/archeology/tools/laws/NAGPRA.htm>

Executive Order 13007, Indian Sacred Sites instructs all federal land management agencies, to the extent practicable, to accommodate access to and ceremonial use of Indian sacred sites by Indian practitioners and to avoid adversely affecting the physical integrity of those sacred sites.

<http://www.cr.nps.gov/local-law/eo13007.htm>

1.1.2 Texas State Rules, Regulations, and Codes

Antiquities Code of Texas (Amended Sept. 1, 1997) The Texas Historical Commission is the legal custodian of the Antiquities Code, including all cultural resources, historic and prehistoric, within the public domain of the State of Texas. Permits to conduct archeological investigation of cultural resources are granted to qualified individuals and institutions who demonstrate the capability and willingness to obtain the maximum scientific archeological and educational information from such investigation. In addition,

materials recovered from such investigations must be properly stored and available to the public for study.

<http://www.thc.state.tx.us/rulesregs/RulesRegsPDF/AntiqCode.pdf>

Rules of Practice and Procedure for the Antiquities Code of Texas

<http://www.thc.state.tx.us/rulesregs/RulesRegsword/Chapter26.doc>

Texas Administrative Code Title 13, Part II, Chapter 25 Rule 25.6—Collections

[http://info.sos.state.tx.us/pls/pub/readtac\\$ext.ViewTAC?tac_view=4&ti=13&pt=2&ch=25&rl=Y](http://info.sos.state.tx.us/pls/pub/readtac$ext.ViewTAC?tac_view=4&ti=13&pt=2&ch=25&rl=Y)

Texas Administrative Code Title 13, Part II, Chapter 29—Management and Care of Artifacts and Collections

[http://info.sos.state.tx.us/pls/pub/readtac\\$ext.ViewTAC?tac_view=4&ti=13&pt=2&ch=29&rl=Y](http://info.sos.state.tx.us/pls/pub/readtac$ext.ViewTAC?tac_view=4&ti=13&pt=2&ch=29&rl=Y)

1.2 Applicability

These guidelines pertain to all archeological material collections and documenting records regardless of their origin.

Archeological material collections and their documenting records that are generated by compliance with historic preservation or environmental laws, regulations, and guidelines must be housed at a museum or repository that has the capability to ensure adequate permanent storage, security, and ready access to collections by qualified users.

1.3 Definitions

Accessibility – The capability of records/collections to be easily and quickly located, organized and indexed/cleaned and cataloged, and be usable by someone other than the original investigator.

Accessioning – The process of transferring title, ownership, or stewardship from the providing source (fieldwork, purchase, gift, transfer, etc.) to the repository/museum.

Accession number – A tracking number unique to a group of incoming collection objects/records, whose purpose is identification, not description; the most common form is the year and order in which the collection is accessioned (e.g., 1997-1).

Accredible standards – Currently acceptable practices and procedures that are greater than minimal; periodically upgraded.

Acid-free – Refers to paper or paper-board products having a chemical pH of 7.0 or higher; loosely-used term referring either to neutral pH or alkaline-buffered materials. However free of acid a paper may be immediately after manufacture, over time the presence of residue chlorine from bleaching, aluminum sulfate from sizing, or pollutants in the atmosphere may lead to the formation of acid unless the paper or board has been buffered with an alkaline substance.

Acid-free alkaline-buffered – Refers to paper or paper-board products to which various alkalines have been added to neutralize acids or serve as an alkaline reserve for the purpose of counteracting acids that may form in the future. Packaging in such materials creates a safety barrier against the migration of acids both into and out of an object. Cellulosic materials (paper, cotton, linen, etc.) require alkaline-buffered or inert surroundings (wrappings, packaging, boxing, etc.).

Acid-free neutral – Refers to paper or paper-board products that have a chemical pH of 7.0, neither acidic nor alkaline. Proteinaceous materials (wool, silk, hair, leather, feather, etc.) require neutral or inert surroundings, as do most photographic materials.

Acquisition – The act of gaining physical possession of an object, specimen, or sample and associated records.

Acryloid B72 (or Paraloid B72) – An acrylic resin (polymethyl acrylate/polyethyl methacrylate copolymer) used as an adhesive or a consolidant; stable and soluble under normal conditions (environmentally-controlled); recommended uses include metals (silver and iron), textiles, lacquer work and wood. Acrylates are known to cross-link (become irreversible) with ultraviolet exposure.

– Chemically an ethyl methacrylate co-polymer, Paraloid B-72 is a durable and non-yellowing acrylic polymer used for consolidating wall paintings (1-5%), fragile wood (5-20%), etc. It may be used as a fixative when diluted with a solvent to secure markings on artifacts and as an adhesive (50%+) for a variety of substrates. Paraloid B-72 is soluble in acetone, toluene, and isopropanol.

Archeological Collections – Material remains and/or documenting records generated by an archeological investigation. (See also *Documenting or Associated Records* and *Material Collections*.)

Archival/ Archivally sound/ Archivally stable – A non-technical term that suggests that a material or product is permanent, durable, or chemically stable and, therefore, can be used safely for preservation purposes.

Associated funerary objects – Objects that, as a part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later, and both the remains and associated funerary objects are presently in the possession or control of a Federal agency or museum, except that other items exclusively made for burial purposes or to contain human remains shall be considered as associated funerary objects.

Baked-enamel – Refers to a finish on metal cabinets used in the past (replaced by powder coating; however, still approved). Liquid enamel is painted on the surface and baked to form a hard coating.

Blueboard – Refers to acid-free, lignin-free corrugated board used for packaging and housing material (boxes, supports, etc.).

Board of Directors – An elected or appointed group of people charged with operating an organization; responsible for setting policy that ensures the organization's charter and bylaws are followed, seeing that the organization acts within the law, establishing fiscal policy and boundaries, providing adequate resources for activities of the organization, selecting and evaluating the chief executive (director), and promoting the work of the organization.

Cataloging – Assigning an object to an established classification system and initiating a record containing identification, provenience, accession and catalog numbers, and location of that object in the collection housing area; each object in a group may be assigned a unique number.

Collection – A related group of objects or specimens and/or associated documents and data in the care of a repository/museum.

Collections Management Policy – A detailed written statement that explains why a repository/museum is in operation and how it goes about its business. It articulates the repository/museum's professional standards regarding objects and records left in its care. It serves as a guide for the staff and a source of information for the public.

Collections Manager – A person who possesses knowledge, experience and demonstrable competence in collections care and maintenance including archival methods and techniques appropriate to the nature and content of the collection. A collection management professional should, as a minimum, have experience in collection management and a graduate degree from an accredited institution in anthropology, history, museum studies, or related discipline, or equivalent experience.

Concerned party – A recognized and authorized representative of a tribe, community, or an organization linked to culturally sensitive materials by ties of culture, descent, and/or geography.

Conservation – The treatment of an object to return or enhance its chemical or physical stability; uses interventive methods. Conservation is different from restoration, which is the process of returning an object to its original or previous condition or appearance mainly for aesthetic purposes.

Conservation report – Written report usually combining facts and narrative to describe the current state of a collection object; includes information regarding the object's provenience, description, and general condition; may include a rough sketch or a photograph of the object. This type of report is done when an object first enters a collection, and thereafter, if it is exhibited, loaned, needs conservation care, etc.

Conservator – A specialist, educated and trained in the preservation and treatment of physically or chemically unstable objects.

Culturally sensitive materials – Objects or materials including human remains whose treatment or use is a matter of profound concern to living peoples who can demonstrate cultural affiliation. Other sensitive components of a collection may include notes, books, drawings, other artworks, photographic media, depictions of human remains, religious objects, and sacred or religious events, and other images relating to culturally sensitive materials.

Curation/Curatorial Services – Managing and preserving a collection according to professional museum curation and archival practices, including, but not limited to:

1. Accessioning, inventorying, cataloging, and labeling a collection;
2. Handling, cleaning, stabilizing, and conserving a collection in such a manner to preserve it;
3. Identifying, evaluating, and documenting a collection;
4. Housing and maintaining a collection using appropriate methods and containers, and under appropriate environmental conditions and physically secure controls;
5. Periodically inspecting a collection and taking such actions as may be necessary to preserve it; and
6. Providing access and facilities to study a collection.

Curator – A specialist educated in a particular academic discipline relevant to the repository/museum's collections and trained in collections care and maintenance. The Curator is directly responsible for the care and academic interpretation of all objects, materials, and specimens belonging to or lent to the repository/museum; makes recommendations for acquisition and deaccessioning; is responsible for attribution, authentication, and research on the collections and the publication of the results of that research. The Curator also has administrative and (if appropriate) exhibition responsibilities and should be sensitive to sound conservation practices; makes policy in all of these areas.

Deaccessioning – The process of legally removing objects from a repository/museum's collections.

Documenting or Associated Records – Original records that are prepared, assembled, and document the efforts to locate, evaluate, record, study, preserve, or recover a prehistoric or historic resource. Some records such as field notes, artifact inventories, and oral histories may be originals that are prepared as a result of the field work, analysis, and report preparation. Other records such as deeds, survey plats, historical maps and diaries may be copies of original public or archival documents that are assembled and studied as a result of historical research. Classes of documenting records (and illustrative examples) that may be in a collection include, but are not limited to:

1. Records relating to the identification, evaluation, documentation, study, preservation, or recovery of a resource (such as site forms, field notes, drawings, maps, photographs, slides, negatives, films, video and audio cassette tapes, oral histories, artifact inventories, laboratory reports, computer cards and tapes, computer disks and diskettes, printouts of computerized data, manuscripts, reports, and accession, catalog, and inventory records);
2. Records relating to the identification of a resource using remote sensing methods and equipment (such as satellite and aerial photography and imagery, side scan sonar, magnetometers, sub-bottom profilers, radar, and fathometers);
3. Public records essential to understanding the resource (such as deeds, survey plats, military and census records, birth, marriage and death certificates, immigration and naturalization papers, tax forms, and reports);
4. Archival records essential to understanding the resource (such as historical maps, drawings and photographs, manuscripts, architectural and landscape plans, correspondence, diaries, ledgers, catalogs, and receipts); and
5. Administrative records relating to the survey, excavation, or other study of the resource (such as scopes of work, requests for proposals, research proposals, contracts, antiquities permits, reports, documents relating to compliance with Section 106 of the National Historic Preservation Act (16 U.S.C. 470f), and National Register of Historic Places nomination and determination of eligibility forms, curation documents and agreements).

Electrostatic finish – See *Powder-coat*.

Federally-associated collections – Archeological collections excavated on Federal lands and Held-in-Trust for the Federal government by designated repositories/museums.

Flammable liquids – Solvents such as ketones (acetone), alcohols, benzines; should be stored in a fireproof (e.g., concrete-lined) cabinet, closet, etc. Labels on containers for all liquids used should be checked for such warnings, and those liquids found to be flammable should be stored appropriately.

Flammable materials – Any materials capable of being ignited easily and of burning with extreme rapidity; should be stored in fire-proof storage area (same as flammable liquids above).

Heating, Ventilation, and Air-Conditioning system (HVAC) – A ducted system that controls temperature, relative humidity, and possibly pollution (gaseous and particulate). The system includes fans with heating and cooling elements mounted in air handlers, humidifiers and/or dehumidifiers, screen filters for filtering particulates (dust), and vapor-phase filters (charcoal, etc.) for filtering gases. HVAC systems range from top-of-the-line systems that accomplish all of the above to ordinary heater/air conditioners similar to those found in residences.

Held-in-Trust collections – Collections generated from public lands that have Federal or State ownership but repository/museum stewardship.

Housing – Safe, appropriate furniture and fittings within which collections are placed for long term storage and preservation.

Human remains – Osteological remains of the species *Homo sapiens sapiens*.

Humidity card indicators – Paper cards that change color as the relative humidity changes.

Hygrometer – A compact instrument that measures the relative humidity through the expansion and contraction of moisture-sensitive elements (hair or paper) that react to changes in relative humidity.

Hygroscopic – A material that absorbs or attracts moisture from the atmosphere.

Hygrothermograph (recording hygrothermograph) – A battery-powered instrument that continuously measures and records both temperature and relative humidity; uses a moisture-sensitive hair to measure changes in relative humidity.

Inert – Refers to products made of non-reactive, chemically stable materials that are not easily decomposed; these materials, such as polypropylene or polyethylene, have no pH value.

Inventory – A physically-checked, itemized list of the objects in a repository/museum's collections.

Letter of Acceptance – A document from the repository/museum stating acceptance of collections and indicating that the Submitting Archeologist has met minimum curation obligations.

Letter of Request for Housing – A document from a Submitting Archeologist to a repository/museum requesting that the facility curate the materials from a specified project/collection; it provides basic information describing the history of that project/collection.

Letter of Transfer/Ownership – Documents the transfer of ownership or specific custodianship of a collection being curated.

Lig-free or lignin-free – Refers to products that are acid-free and have had the lignin removed. Lignin is a naturally-occurring organic acid that acts as a binding agent in woody plants. It is easily oxidized, resulting in yellowing, embrittlement, and weakening of the products. Lignin has been replaced by alpha-cellulose, a stable form of cellulose derived from cotton.

Material Collections – Artifacts, objects, specimens, samples, and other physical evidence that are excavated or removed in connection with efforts to locate, evaluate, document, study, preserve or recover a prehistoric or historic resource. Classes of material remains (and illustrative examples) that may be in a collection include, but are not limited to:

- 1.Components of structures and features (such as houses, platforms, enclosures, terraces, fortifications, and mounds);
- 2.Intact or fragmentary artifacts of human manufacture (such as tools, weapons, pottery, basketry, and textiles);
- 3.Intact or fragmentary natural objects used by humans (such as rock crystals, feathers, and pigments);
- 4.By-products, waste products or debris resulting from the manufacture or use of man-made or natural materials (such as dumps, cores, and debitage);
- 5.Organic material (such as vegetable and animal remains, and coprolites);
- 6.Human remains (such as bone, teeth, hair, and cremations);
- 7.Components of petroglyphs, pictographs, or other works of artistic or symbolic representation;
- 8.Components of shipwrecks (such as pieces of the ship's hull, rigging, armaments, apparel, tackle, contents, and cargo);

- 9.Environmental and chronometric specimens (such as pollen, seeds, wood, shell, bone, charcoal, tree core samples, soil, sediment cores, obsidian, volcanic ash, and baked clay); and
- 10.Paleontological specimens that are found in direct physical relationship with a prehistoric or historic resource.

Melinex – Archival polyester film from DuPont; dimensionally stable, chemically resistant, non-yellowing (replaces Mylar).

Microfoam – An expanded resin of polypropylene, an inert stable plastic; can be used for padding of objects in boxes or on shelves.

Mission statement – A written document that states a repository/museum’s institutional philosophy, scope, and responsibility.

Mobile compactor units – Metal storage units mounted on tracks in the floor allowing units to be moved where needed. This system eliminates the need for several aisles, using instead a single "floating" aisle; also known as high-density storage due to the utilization of valuable space usually taken up by aisles.

Museum – A legally-organized and permanent not-for-profit institution, essentially educational or aesthetic in purpose, with professional staff, that owns and utilizes tangible objects, cares for them, and exhibits them to the public on some regular schedule. A museum may have Held-in-Trust collections generated from public lands.

Mylar – A common trade name from DuPont for a polyethylene terephthalate, an inert, chemically stable plastic. Its characteristics include transparency, colorlessness, and high tensile strength. It is commonly used in sheet or film form to make folders, encapsulations, and book jackets.

NAGPRA – Native American Graves Protection and Repatriation Act. This act was adopted in 1990 and requires any federally-funded institution (except the Smithsonian) to inventory collections, develop a list of all human remains and sacred objects for federally-recognized Native American groups. The institution is to send this list to the Department of the Interior in order to make it available to Native American and Hawaiian groups (who may request repatriation of such objects). If an institution is involved with NAGPRA, researcher access, inventorying, and deaccessioning procedures may be affected by NAGPRA. However, the actual care of collections is the focus of accreditation concern, rather than NAGPRA matters themselves.

Nitrate negative – An unstable cellulose-based film whose degradation and extreme flammability can harm or destroy photographic collections; long-term preservation of a collection of cellulose-based film negatives would be a frost-free freezer.

Packaging – Archival-quality materials within which objects are surrounded, contained, and enclosed for long term storage and preservation.

Perpetuity – When applied to certain materials bequeathed to or accepted by a repository/museum, to be held and cared for forever.

Polyethylene – An inert, chemically stable, highly flexible, transparent or translucent plastic; comes in the form of sheeting or bags.

Polypropylene – A thermoplastic polymer used in a wide variety of applications, including packaging, textiles, laboratory equipment, plastic parts, and reusable containers of various types; it is rugged and unusually resistant to many chemical solvents, bases and acids. For archival purposes, it is

relatively rigid when in its untreated (oriented) sleeve format, soft when surface-treated in its binder storage pages format.

Powder-coat – Refers to the preferred finish on metal housing units; consists of an exterior baked-on coating of a non-reactive, solvent-free powder that is electrostatically applied.

Preventive conservation – Non-interventive collection care to minimize conditions that may cause damage; includes maintaining proper environmental controls, screening for air-borne particulates, monitoring for pests, and stressing proper handling and good record-keeping.

Provisional Housing Agreement – A written agreement between a repository and a submitting archeologist stating conditions under which the repository will accept and curate the materials from a project turned in for curation by the submitting archeologist.

Psychrometer – A device for measuring relative humidity using the differences in the measurements from dry- and wet-bulb thermometers in moving air; air can be moved by human physical action as in a sling psychrometer or with the aid of a battery-operated fan as in a battery-operated psychrometer.

PVA (or PVAC) – The copolymer polyvinyl acetate. It is a colorless transparent plastic, widely used in years past both as an adhesive and consolidant based on the formula selected. It comes in bead form and is mixed with a liquid carrier (solvent such as acetone). Conservators no longer routinely recommend PVA, as it has proven unstable at high temperature and humidity. Acryloid (Paraloid) B-72 is the appropriate replacement for PVA.

Repatriation – The return of culturally sensitive materials to concerned parties. Repatriation is a collaborative process between scientists and concerned parties in their attempts to interpret and protect people and cultures with respect, dignity, and accuracy. Repatriation is a partnership created through dialogue, cooperation, and mutual trust.

Repository – A permanent, not-for-profit education or research-oriented agency or institution that provides in-perpetuity legal housing and curation of records and material collections.

Research Design – A written plan that provides the rationales, goals, and methods for investigations of archeological sites including, but not limited to:

- 1.The scientific and anthropological reasons for pursuing the proposed investigation;
- 2.Hypotheses to be tested and the questions to be asked of the data; that is, what the investigator hopes to determine about past human activity, including such items as occupational sequence, settlement patterns, subsistence strategies, chronology, trade and social networks, alliances, etc.;
- 3.The explicit manner in which data will be collected and analyzed, and how these relate to the research goals;
- 4.Plans for consultation with affiliated Native Americans, and/or other cultural groups;
- 5.Inferential techniques to be used to interpret the data; and
- 6.Schedule and work effort estimates.

Reversible – Able to return to a previous state. A process that can be undone; a method of treating or coating an object that is not permanent and can be removed without damaging the item.

Sacred objects and objects of cultural patrimony – Specific items that are needed by traditional religious leaders for the practice of an ongoing religion by present-day adherents.

Scope of collections – Defines the purpose of a repository/museum's collection and sets agreed-upon limits that specify the subject matter, geographic location, and time period to which the collections must relate.

Smithsonian Institution Trinomial Site Designation System – Provides a state number, then a county abbreviation, and finally a sequential number that identifies a particular site recorded in the county. For example, 41LU1 (Lubbock Lake Landmark): “41” designates the state of Texas; “LU”, stands for Lubbock County; and “1” indicates the first site in Lubbock County recorded with the Texas Archeological Research Laboratory at The University of Texas at Austin (state repository for site forms).

Specimen-level inventory – A specimen-level inventory should be project- and site-specific and include:

1. Trinomial (and field site number, if used);
2. Lot/catalog number;
3. Description of materials and quantity;
4. Provenience, including horizontal and vertical values, as well as unit, feature, shovel test, notations, as appropriate;
5. Date of collection; and
6. Names of collectors and names of catalogers.

Stabilizing – Treating materials to prevent or greatly limit their deterioration.

State-associated collections – Archeological collections excavated from State lands

Sticky trap – Small paper trap treated with a sticky substance to catch and hold crawling insects and very small animals; used mainly for monitoring pest activity rather than actually ridding the premises of them.

Systematic – Using a methodical and thorough set of guidelines and procedures to gather archeological collections, to house and document archeological records and material collections, etc.

Thermohygrometer – See *Hygrothermograph*.

Tyvek – A trade name for a form of polyethylene sheeting; used for wrapping, lining drawers, interleaving, or draping open shelves.

Unassociated funerary objects – Objects that, as a part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later, where the remains are not in the possession or control of the Federal agency or museum and the objects can be identified by a preponderance of the evidence as related to specific individuals or families or to known human remains or, by a preponderance of the evidence, as having been removed from a specific burial site of an individual culturally affiliated with a particular Indian tribe.

UV light filter – Transparent film that comes in the form of sheets that adhere to windows or sleeves that wrap around fluorescent tubes; blocks a percentage of the ultraviolet light emitted through windows or from fluorescent lighting; sleeves usually should be replaced when bulbs are changed.

Volunteer/Docent – A person who renders aid, performs a service, or assumes an obligation voluntarily.

2. GUIDELINES FOR SUBMITTING COLLECTIONS FOR CURATION

Archeological collections consist of records, which document the history of the project, and materials, which are the artifacts, samples, and other tangible remains collected during the course of a project. Collections may consist of records and materials, or they may consist of records only. Typical types of records and materials are discussed in further detail below.

2.1 Arranging for Curation with an Archeological Repository

2.1.1 Choice of Archeological Repository

In choosing a repository, the archeologist should consider the existence of previously excavated collections, with the aim of keeping collections from the same site together when at all possible. In particular, it is most important that materials be housed in the state of origin. The archeologist should confer with the selected repository as early as possible in the project planning process regarding specific curation guidelines required by that particular facility.

2.1.2 Letter of Request for Housing

A letter of request for housing should be submitted to the repository by the archeologist prior to fieldwork. This letter provides advance notice to the repository that the archeologist intends to submit collections for curation. By requesting housing at the start of a project the archeologist will know in advance if the selected repository agrees to take the resulting collection for curation. Basic information typically included in the letter is:

- Name of submitting archeologist
- Name of sponsoring individual/agency/institution
- Nature of investigation
- Date of investigation
- Project area and/or site(s) location(s)
- A need for housing material and documenting records collections (e.g., a collection may include records only)
- Projected date for curation
- Specifications of ownership and legal responsibilities

Examples:

Texas Archeological Research Laboratory (TARL):
<http://www.utexas.edu/research/tarl/curation/Form1.pdf>

Center for Archaeological Research (CAR):
http://car.utsa.edu/curation/Curation_webpage.htm

The Museum, Texas Tech University:
<http://www.depts.ttu.edu/museumttu/CM%20Procedures2006.pdf>

2.1.3 Provisional Housing Agreement

After the archeologist submits a letter of request for housing, the repository will provide a provisional housing agreement. This document is the agreement that the repository will provide curation for the collection, assuming that the repository's curation requirements are met.

2.1.4 Letter of Transfer/Ownership

Appropriate documents delineating transfer of ownership or specific custodianship must accompany the collection into curation. These documents let the repository know that the

archeologist has the permission of the individual or agency to turn over the collections to the repository for curation. Upon transfer of materials from the archeologist to the repository, the archeologist must submit this transfer of ownership which specifies ownership of the collections to be curated, and clarifies any legal responsibilities to be assumed by the repository.

Examples:

TARL: <http://www.utexas.edu/research/tarl/curation/Form6.pdf> (for a private sponsor)
<http://www.utexas.edu/research/tarl/curation/Form7.pdf> (for a public agency)

Center for Archaeological Research (CAR):
<http://car.utsa.edu/curation/curationprocedures.htm>

The Museum: <http://www.depts.ttu.edu/museumttu/CM%20Procedures2006.pdf>

2.1.5 Letter of Acceptance

The archeologist should ask the repository to provide a letter stating acceptance of the collections, thus indicating that the archeologist has met all applicable curation obligations and that the collection is now the responsibility of the repository. A repository is not obliged to provide such a document until accessioning is completed and the curation bill is paid, if such has been sent. As a separate document, repositories may provide a receipt indicating that a collection has been received upon its arrival at the facility.

2.2 Standards for Preparing Archeological Records

Records submitted for curation should be organized and in good condition. Minimally, records submitted to a repository should be sufficient to document the project and its collections.

Examples of records that may be included are:

- Site form with accompanying USGS map section
- Daily journal
- Photographic log
- Survey or excavation notes
- Photographs (e.g., prints and negatives, color slides, infra-red, digital images)
- Maps and mapping notes (e.g., transit, plane table, floor plans, sketches)
- Field catalog of specimens
- An itemized specimen inventory
- Analysis notes
- Special studies notes
- Drafted plates and illustrations
- Final report, manuscript draft
- Copies of correspondence
- Microfilm or microfiche data
- Computer media (disks, code sheets, computer printouts)
- Transcripts, tapes; oral/historical documentation
- Copies of historic documents
- Bibliographic records
- News clippings, miscellaneous published materials
- Financial and budget records
- Explanation of cataloging system used
- Letter specifying ownership of curated materials

While each repository will have its own policies and procedures for the organization of records, all archeologists should:

- 2.2.1 Include original documents unless an alternate agreement has been reached with the repository. All curated records must be on archivally stable (lignin-free, acid-free) material and must be in archivally stable folders or binders, as appropriate. Large individual records such as maps and profiles are to be on archivally stable paper or polyester film or in archivally stable folders.
- 2.2.2 Review all records submitted for curation before submission to ensure that they are legible and reproducible, particularly if they are handwritten or in pencil. Special care should be taken to ensure that secondary documents (typed or rewritten) are accurate.
- 2.2.3 Include, as minimum documentation of a site, a completed site form and the location shown on a USGS topographic map (1:24000). The completed site form must have all blanks filled or reason for omission noted so that the researcher can distinguish among unavailable, unknown, ignored, or overlooked data.
- 2.2.4 Provide Universal Transverse Mercator coordinates [note which NAD is used], at least to site centerpoint, or latitude and longitude if no UTM ticks are marked. The map plotting should indicate the approximate extent of a site and note any possible continuations. If a site is part of a survey, unless the project contract specifies otherwise, survey boundaries and coverage should be indicated. These data are of assistance to researchers, as negative survey results are often overlooked.
- 2.2.5 Whenever feasible, continue consecutive ordering of number series used in previous investigations. Thus lot numbers, photo numbers, excavation units, etc., would be continuous, and retain logical, non-duplicated designations. Archeologists should check with the chosen repository concerning previously recorded sites.

Examples of curation standards for records:

TARL: <http://www.utexas.edu/research/tarl/curation/CurStipsRecords.pdf>

CAR: <http://car.utsa.edu/curation/curationprocedures.htm>

The Museum: <http://www.depts.ttu.edu/museumttu/CM%20Procedures2006.pdf>

2.3 Standards for Preparing Material Collections

2.3.1 Biological Attack

Insects are attracted to any dirt that may be found on objects; mold and mildew thrive in darkness on damp surfaces. These microorganisms can attack items that are not cleaned properly or dried completely. Relative humidity should be controlled in order to prevent conditions conducive to microorganism growth.

- 2.3.1.1 Specimens must be completely dried after cleaning and before packaging and housing.
- 2.3.1.2 Relative humidity must be controlled to prevent mold and mildew.
- 2.3.1.3 Proper ventilation is necessary to insure air movement.

2.3.2 Cleaning

Because some specimens are fragile and hygroscopic, material such as bone should never be soaked in any cleaning agent, and it should be allowed to air dry after cleaning. Force-drying causes additional stress, which can damage the specimen.

- 2.3.2.1 Procedures for specimens in good physical condition:
 1. Dust or lightly brush off surface dirt.

2. Additional cleaning may make use of water, acetone, or a similar cleaning agent.
 - a. Dampen surface with a soft brush or cotton swab and rub gently.
 - b. Dry area with a clean cotton swab or soft cotton cloth.
 - c. Allow to air dry; blow dryers or heaters can cause additional stress and cracking.
 - d. Dry completely before storage.

2.3.2.2 Procedures for specimens in poor physical condition:

1. Consult with a conservator.

2.3.3 Labeling

2.3.3.1 The catalog number should be small, located in an inconspicuous spot, and placed so as not to obscure any distinctive feature. Never place a label on the retouched edge of a lithic tool, the exterior surface of pottery, or the maker's mark or other diagnostic feature of an artifact. Always try to label the ventral (smooth) face of a flake or tool. For bifacial lithic items, and for all items where there may be a question, try to label the least photogenic surface.

2.3.3.2 Use a two-coat labeling system to insure reversibility while providing stability and imperviousness to moisture.

1. Never write directly on the specimen.
2. Never use fingernail polish, white-out, or other such substance.
3. Apply a base coat of 10% Paraloid B-72 solution for most specimens; use white titanium pigment in B-72 as a base coat for dark-colored specimens. Allow to dry before labeling.
4. Use black India ink, Pigma or Millennium pigmented pens for the number. If the base is a dark color, use white-pigmented ink or use a white-pigmented undercoat prior to labeling with black ink or pigment pens. Allow to dry.
5. Cover the number with a top coat of 10% Paraloid B-72 solution.

2.3.3.3 Artifacts too small to be labeled

1. Usually sort these artifacts by artifact class or analytic unit.
2. Place in 4-mil polyethylene self-sealing bags (or other archivally-stable containers).
3. Label clearly. Provenience information must be on a tag made of Tyvek or acid-free paper and enclosed in the container.
4. Include information regarding artifact counts and weight totals.

2.3.3.4 Items not directly labeled; these include organic materials such as human remains, matting, wood, and fur, and deteriorating materials such as metal and flaking/patinated glass or eroding ceramics

1. Label with Tyvek or acid-free paper tags.
2. Affix tags without endangering delicate materials. They should not be in direct contact with the material, but may be enclosed in a poly bag or inserted between double bag enclosures.
3. Treat small items in this category as described in 2.3.3.3 above.

2.3.3.5 Illustrated or photographed artifacts

1. Consider identifying artifacts illustrated or photographed in reports and/or publications. They should not be separately housed, but kept with the appropriate analytical groups that they represent.
2. This information (that an artifact is represented in an illustration) should be noted in the associated document catalog; reference to the report and the figure number would be helpful.

2.3.4 Packaging

- 2.3.4.1 Specimens should not be allowed to roll loosely, bump into each other, or be stacked on top of each other in their container.
- 2.3.4.2 Specimens are not to be packaged or housed in acidic boxes.
- 2.3.4.3 All packaging should be done with acid-free materials, lignin-free materials, or polyester/polyethylene/polypropylene materials. Poly bags should be 4-mil.
- 2.3.4.4 Padding or a similar protective barrier should be used as needed to protect individual specimens within a larger container.

Additional details concerning packaging materials:

All packing materials must be archivally stable and acid-free. The materials listed below are some of the most common items used for packaging:

Acceptable Materials:

- Acid-free corrugated board and mat board, preferably unbuffered
- Clear, polyethylene self-closing plastic bags without pleats
- Clear, polyethylene plastic containers
- Unbuffered, acid-free cardboard boxes, various sizes
- Unbuffered, acid-free tissue paper
- Polyethylene foam, preferably foamed with nitrogen
- Polystyrene – rigid boxes only
- Unbleached muslin, washed 5 or 6 times to remove sizing
- Silica gel (packaged)

Unacceptable Materials:

- Colored or clear plastic bags with pleats and/or twist ties
- Colored plastic containers
- Plastics containing PVCs
- High acid content or buffered cardboard boxes
- High acid content or buffered tissue paper
- Paper towels
- Newspaper
- Any acidic paper products
- Glass containers
- Rubber bands
- Pressure sensitive tapes (scotch, masking, mailing, etc.)
- Bubble pack
- Cotton Wool
- Polystyrene peanuts or beads

Non-archival quality pressure-sensitive tape (e.g. scotch, masking, strapping) fasteners and glues should never be used on documents. Any material in contact with paper records should be of archival quality, reversible, non-yellowing and should not cause damage to the paper.

2.3.5 Conservation

Any conservation treatment should be done in consultation with the repository. Items in very fragile condition should be sent to an experienced conservator for treatment. In any conservation procedure, all work should be reversible both in the short-term and long-term.

2.3.5.1 Adhesive: use a reversible mending agent such as Paraloid B-72.

1. Coat the edges of the break with a 10% Paraloid B-72 solution and allow to dry.

2. Apply a 20-25% Paraloid B-72 solution as an adhesive to conjoin the pieces; allow to dry thoroughly.
- 2.3.5.2 Consolidant: use a reversible product such as Paraloid B-72.
1. Apply a Paraloid B-72 solution from 1% to 10% depending on condition and porosity.
 2. Allow to dry thoroughly.
 3. Apply second (or more) treatment(s) if necessary, allowing thorough drying between treatments.
 4. Conservation treatment records should be maintained as part of the documentation of the specimen.

Examples of curation standards for material collections:

TARL: <http://www.utexas.edu/research/tarl/curation/materialprep.php>

CAR: <http://car.utsa.edu/curation/curationprocedures.htm>

The Museum: <http://www.depts.ttu.edu/museumttu/CM%20Procedures2006.pdf>

2.4 Checklist for Submitting Archeological Material Collections

Material collections submitted for curation should be organized and in good condition. Archeological materials submitted for curation could include the following categories:

- Ceramics (e.g., vessels, figurines, sherds, pipes)
- Lithics (e.g., stone tools, debitage, burned rock, comparative materials)
- Glass (e.g., window panes, bottles, beads)
- Metal (e.g., nails, buttons, armaments)
- Synthetic materials (e.g., plastic, nylon)
- Faunal materials (e.g., human and animal osteological, shell, horn)
- Microfossils
- Vegetal materials (e.g., charcoal, wood, seeds, pollen, phytolithic, matting, basketry)
- Coprolites
- Burned rocks
- Matrix samples
- Soil samples
- Radiocarbon samples
- Archeomagnetic samples
- Thermoluminescence samples
- Other samples

It is held that, with only rare exceptions, material collections to be housed have been analyzed, and therefore artifact cleaning, cataloging, preservation, and site-specific specimen-level inventories have been completed according to established guidelines. While specific handling guidelines are formulated by each repository, all repositories require an archeologist to see that:

- 2.4.1 Material collections are accompanied by all documenting records, including any analysis records.
- 2.4.2 An explanation of the cataloging system is provided.
- 2.4.3 While proper cleaning is expected for most items collected, there may be specimens that are isolated for special studies where cleaning would compromise or change the results of the study. These items should be identified, separated from other collected material, and omitted from the usual cleaning process. If the items are being kept for future prospective tests and will be coming into curation in an unwashed state, this status must be reflected in the records (inventories, packing documents and labels...). All other materials are to be

- cleaned and preserved using appropriate reversible, nondestructive techniques. The materials should be accompanied by documents listing these techniques, and the records adjusted to document the items singled out for special studies.
- 2.4.4 Specimens needing ongoing conservation are separated and documented. If ongoing preservation costs are not included in the initial fee, additional charges may be assessed.
 - 2.4.5 All specimens are labeled in accordance with the accessioning, cataloging, and labeling systems of the repository.
 - 2.4.5.1 Unless alternate arrangements have been made with the repository, all specimens should be labeled (indelible stamp, India ink, etc.) with a site designation and intrasite provenience. Specimens too small to be numbered and/or large groups of similar specimens retaining original provenience groupings are to be placed in labeled containers to ensure against loss of provenience and/or analysis groupings.
 - 2.4.5.2 Fabric or paper tags should be affixed to perishable or fragile specimens that are not to be directly marked upon.
 - 2.4.5.3 Tags in bulk samples (e.g., matrix, soil, burned rock) should be enclosed in small plastic bags within bags.
 - 2.4.5.4 Boxes should be labeled with permanent markers on their exterior surfaces.
 - 2.4.5.5 All paper labels and tags should be acid- and lignin-free.
 - 2.4.5.6 Labels in or on containers should provide the following information: site designation, project name and date, provenience data, analytical group, and number of specimens.
 - 2.4.6 The quantity of bulk samples (e.g., matrix, soil, burned rock, etc.) to be curated is set before submission to the repository. These determinations should give consideration to the potential of samples and specimens for future research and to the limited space for housing in most repositories. There was a Department of the Navy sponsored study that showed that the viability of samples curated in less than ideal conditions were virtually useless. The authors recommend keeping small (less than 6X6 sized) bags for chemical studies. Sampling is highly recommended.
 - 2.4.7 All artifact bagging is done with polyethylene plastic bags, rather than paper bags, in accordance with the packaging system of the repository.
 - 2.4.8 The use of plastic or cardboard containers in addition to plastic bags is considered when they are appropriate for protection, separation, and/or future use of the collections. Boxes should be sturdy and should fit the size/shape requirements of the repository.
 - 2.4.9 Following analysis, analytical categories are maintained and not disassembled and returned to field provenience separations for housing.
 - 2.4.10 If unusual circumstances exist and a collection is not analyzed, it is packaged according to its field provenience and accompanied by a corrected and updated field catalog.
 - 2.4.11 A specimen inventory accompanies each collection. Where required by the facility, this inventory must accurately reflect the quantity of material, the analysis, and packaging order. Analytical group designations on inventories should correspond to those used in the final report and on packaging labels.
 - 2.4.12 Collections should be hand transported to the repository, if at all possible. Where shipping is unavoidable, wrap and pad artifacts well to withstand impacts and use a carrier with a tracking system. The box-within-a-box packaging method is preferred. If materials must be shipped, contact the repository in advance for guidance.

3. STANDARDS FOR THE ARCHEOLOGICAL REPOSITORY

Because the quantity of archeological records and material collections in Texas is substantial and growing, and due to the traditionally wide variability of housing and accessibility of these collections, standards have been established for repositories that assume the responsibility of permanent custodianship. These standards were finalized by the Texas Historical Commission as the Curatorial Facility Certification Program in 2005 (<http://www.thc.state.tx.us/archeology/aacfcfp.shtml>). All repositories, whether accepting state-associated held-in-trust collections for curation or not, are urged to adhere to the standards set in this program. Archeologists too should be mindful that the repository they select adheres to the standards of this program. The following is a snapshot of the current (2010) standards from those documents:

3.1 Characteristics of a Certified Curatorial Facility

A certified curatorial facility has a number of important characteristics that it shares with all other certified curatorial facilities. These are:

- It is a museum or repository.
- It is a non-profit, institutional organization.
- It has a mission statement, statement of purpose, and scope of collections statement that guides its collecting.
- It has a clear fiscal plan with sufficient funding to properly care for collections.
- It has a written, integrated Collections Management Policy that guides collections activities and addresses acquisitions, scope of collections, legal title, held-in-trust agreements, contract of gift, accessioning, deaccessioning and disposal, cataloging, loans, destructive loans, inventory, insurance, appraisals, access to collections, record keeping, collections care, conservation, emergency preparedness, integrated pest management, and security.
- It has written, integrated Collections Management Procedures that guide the implementation of policy and address acquisitions, scope of collections, legal title, held-in-trust agreements, contract of gift, accessioning, deaccessioning and disposal, cataloging, loans, destructive loans, inventory, insurance, appraisals, access to collections, record keeping, collections care, conservation, emergency preparedness, integrated pest management, and security.
- It has a well-maintained facility with environmental controls and security and fire protection systems.
- It has a staff trained in collections objects care that abides by an institutional code of ethics.
- It provides safe, supervised access to collections to visiting scholars and researchers.
- It has functional accession, catalog, inventory, and photo documentation systems.
- It has an updated and current list of state-associated held-in-trust collections that it curates.
- It has a baseline inventory of each held-in-trust collection.
- It provides collections housing with archival housing units and packaging materials and with sufficient space to house collections safely.
- It has a complete and signed Held-in-Trust Agreement for a minimum of 80% of the state-associated held-in-trust collections at the facility.
- It has a minimum of 80% of its state-associated held-in-trust collections accessioned.
- It has a minimum of 65% of its state-associated held-in-trust collections cataloged.
- It has insurance or an insurance waiver from the THC for its state-associated held-in trust collections and facility.

4. GUIDELINES FOR TREATMENT OF HUMAN REMAINS

4.1 Respectful Treatment, Handling, and Curation during Temporary and/or Long Term Housing of Human Remains and Associated Funerary Objects

Human remains and objects associated with funerary practices that are either intentionally excavated and deposited for curation or identified in extant collections through consultation must be handled with respect, cared for, and preserved during temporary and/or long-term housing. Where cultural affiliation is known, consultation with the appropriate group or descendants may identify special handling or housing requests that the curation facility will do its best to accommodate.

After excavation, it is important that individuals are kept together and not commingled. In the same way, the remains of a given individual and their associated funerary objects should be kept together (or physically nearby) for temporary and/or long-term housing.

4.1.1 Cleaning

Human remains are fragile and hygroscopic (attract moisture from the atmosphere). Poorly preserved human remains should not be washed. Always consult with a bioarcheologist or bone conservator for post-excavation treatment. Remains that are not washed should be allowed to dry at room temperature and kept away from direct sunlight, hot light sources, ultraviolet lighting, ventilation or heat ducts, exterior walls, and windows. Temperature and humidity fluctuations should be avoided.

- 4.1.1.1 Loose earth and dust can be removed by careful, soft brushing and not require washing.
- 4.1.1.2 If necessary, washing should be done with extreme care using lukewarm water to dampen soft brushes and sponges.
- 4.1.1.3 Never completely immerse bone or allow it to become saturated.
- 4.1.1.4 Water should be changed frequently and after each individual.
- 4.1.1.5 Take care not to damage tooth enamel or to remove deposits of dental calculus; always use a damp sponge, never use a brush.
- 4.1.1.6 Handle the cranium with particular care and ensure that all soil is removed from its interior; soil left in any hollow bones will shrink and harden, causing considerable damage.

4.1.2 Drying

Once the remains have been dry brushed or washed, dry completely at room temperature and out of direct sunlight and away from hot light sources, ultraviolet lighting, ventilation or heat ducts, exterior walls, and windows.

- 4.1.2.1 Bones should be laid out to dry in such a way as to minimize the possibility of the remains of different individuals being mixed.
- 4.1.2.2 Never apply preservative agents, consolidants, varnish, glue, or adhesive tape to human material.

4.1.3 Cataloging and Labeling

- 4.1.3.1 Do not write directly on the bones or associated funerary objects.
- 4.1.3.2 Use an acid- and lignin-free paper label or other archival labeling material (e.g., Tyvek tags).
- 4.1.3.3 Attach label inside and outside of the bag or other packaging.

4.1.4 Packaging

- 4.1.4.1 Bones must be completely dry before they are packaged.

- 4.1.4.2 Ideally keep human remains and funerary objects from a single individual burial together.
- 4.1.4.3 Bones should be individually wrapped securely with enough padding to prevent damage.
- 4.1.4.4 Ensure that the bones cannot fall out of bags or boxes and become lost or commingled.
- 4.1.4.5 All packaging and padding should be done using acid- and lignin-free or polyester/polyethylene/polypropylene materials.
- 4.1.4.6 While it is best to avoid stacking containers that hold human remains, it can be done if the boxes are sturdy and descendant groups are not adverse. If at all possible, requests by descendant groups bearing on packaging and housing of human remains should be accommodated.
- 4.1.4.7 Padding or a similar protective barrier should be used to protect individual bones that are stored within a larger container.
- 4.1.4.8 Human remains and associated funerary objects should always be in kept in a secure, nonpublic area away from activity.