

***GUIDELINES AND STANDARDS FOR THE CURATION OF
ARCHAEOLOGICAL COLLECTIONS***

Delaware Division of Historical and Cultural Affairs

Delaware State Museums

Charles H. Fithian
Archaeologist

INTRODUCTION

The Delaware Division of Historical and Cultural Affairs (henceforth referred to as the Division) is the principal organization charged with the proper preservation and management of Delaware's cultural legacy. As a part of the Division, Delaware State Museums (henceforth referred to as Museums) is one of two established repositories responsible for the long-term curation of archaeological collections recovered from the State of Delaware. Museums' has served as an archaeological repository and provided archaeological curation services beginning in the 1950s to the present day.

As a part of the Delaware Division of Historical and Cultural Affairs, the curatorial responsibilities and authority of Museums are established through provisions in the Delaware Code, Federal legislation and regulations, and standards within the archaeological profession. State of Delaware provisions are as follows: Chapter 53, *Archaeological Sites In The State*, Section 5303, *Qualified Museums*, establishes Museums as a qualified museum and scientific institution; Section 5304, *Place of deposit of objects and records for permanent preservation*, further establishes Museums as one of two official repositories for the curation of archaeological materials within the state of Delaware. The responsibilities and authorities of Museums were established in Chapter 54, *Archaeological Activities*, Subchapter 1, Section 5401, *Duties of the Department of State*. In addition to the curation of state collections, Museums is also a recognized facility for the curation of collections derived from compliance projects located on Federal properties. These collections are curated and administered according 36 CFR Part 79: *Curation of Federally-Owned and Administered Archaeological Collections*.

The collections curated and administered by Museums are known as the Delaware State Archaeological Collections, and consist of collections derived from Section 106 compliance projects, activities on state owned and managed lands, two Federal wildlife refuges and one military installation, and appropriate avocational activities.

Archaeological collections, including the smallest, are the most complex groupings of cultural materials found in repositories and museums. They comprise a wide range of materials, the number of which continue to expand as research vectors include an increasing number of questions, issues, and

directions. These collections include the artifacts, environmental samples, biological materials, and a wide range of associated records. In this group are field documentation, laboratory documentation, photographic materials, electronic data, project correspondence, historical documentation, analytical, technical, and conservation reports, and submitted/published report(s) and publications. Human remains may also be present pending legal and legislative requirements, institutional directives, and stakeholder interests.

Archaeological investigation by its nature removes portions of, or complete sites, from a locale's cultural record. The information within a collection becomes the only material means to understand the human behaviors present at that site, and the larger contexts of which the site was a part. For the compliance with Section 106 to be complete, the proper handling and curation of collections must be included among its requirements. Archaeologists have an ethical and professional obligation to preserve these remains in such a way that ensures their integrity, and that the future research and interpretational potential of these material are retained and preserved. Towards the accomplishment of that goal, Museums has established and formulated these basic guidelines and standards for the care, handling, and preservation of archaeological collections.

1.00 ARTIFACT CLEANING

1.01. Cleaning is necessary for the accurate identification and study of many artifact types. All artifacts should be cleaned unless this will harm the object, or result in the loss of artifactual data. Appropriate cleaning procedures depend upon the type and condition of the material. Due care must be exercised during the cleaning process to insure that the integrity and information value of the object are maintained.

1.02. Generally, cleaning with straight tap water is appropriate. Good judgment should be exercised in the cleaning of soft materials. Examples of soft materials would include, but are not limited to, artifacts such as bone, some Native American ceramics, tin-glazed earthenwares.

1.03. Metals such as copper alloy, iron, pewter, tin, etc. should be dry brushed only. Dry brushing should be performed with soft-bristled (soft toothbrush, narrow width paintbrush, etc.), or fiber-bristled brushes.

1.04. Any cleaning of organic materials should proceed with great caution. These include, but are not limited to, artifacts composed of leather, textiles, paper, wood, floral remains, and faunal materials. The cleaning of some these materials can be performed simply by rinsing in fresh tap water. In most cases, however, this artifact group should be examined by a conservator, or someone familiar with conservation assessment. With the exception of faunal remains, provisions to keep these artifact types wet or moist should be made until conservation assessments or treatments can be made.

1.05. Artifacts that have visible residues, which are of research potential, such as char on ceramic vessels or smoking equipment, and coatings, such as tinning on copper alloy artifacts, should be approached with caution. Because some of these residues and coatings can be subtle, close inspection and good judgment are requisite for the proper processing of these materials

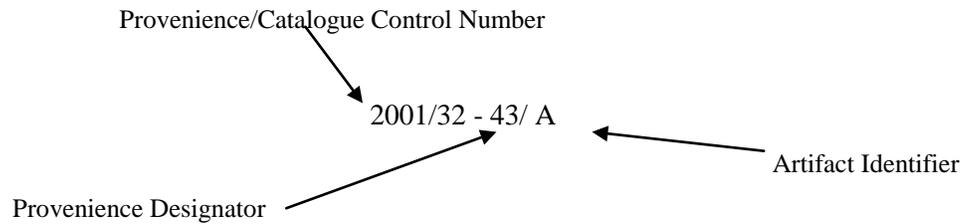
1.06. Under no conditions are samples intended for C-14, blood residue analysis to be washed or marked. Samples intended for these analyses must be containerized (described in section 4) only.

2.00 ARTIFACT NUMBERING AND LABELING

2.01. The first step in this process is acquiring a **provenience/catalogue number** for the defined site, or sites, within the project/study area immediately after the DE SHPO has assigned a specific site number. **Do not wait until later in the course of a project to get a numbers for a site or sites.** These binomial and /or alpha-numeric numbers provide a means of maintaining specific proveniences within a site as well as maintaining intersite relationships. The numbers are issued by Museums' archaeologist, and are kept in a centralized listing of all these numbers extending back to 1965. This number must be included in the number that is to be placed on the artifacts.

2.02. Artifacts from non-sites, or "findspots," that occur within a project area, will be assigned a provenience/catalogue control number(s) after consultation has occurred between the qualified professional, DE SHPO, and Museums' archaeologist.

2.03. The number applied to the artifacts must have three basic components. They are to include the following:



The Provenience/Catalogue Control Number:

This composite number is a unique designator for a specific archaeological site and serves as the basic means for identifying materials from a specific site or area.

The Provenience Designator:

This number is to be assigned to each discrete provenience established and /or recognized at a site. These numbers provide a means of maintaining intrasite patterns and provide a simple, but flexible, means of controlling a variety of data. For example, this number could be used to designate a specific area, or loci, within a site, or to identify a specific level within a feature or feature section. The numbers are to be drawn from a sequential list that is to be established and maintained only by the principal investigator, and are to be assigned only by this person, or his or her designate. Provenience designators can also serve as an index and processing log for the laboratory staff. The provenience designator list can be used to assist in preventing the loss of materials during the transfer of materials from the field, and can be used as a log during the laboratory processing. Should materials be collected from a site without strict provenience or areal control, they will receive a "General site" designation. This will be identified through the use of the delta symbol (Δ). For example, artifacts collected from a site with this designation would be marked 89.42. Δ . An artifact identifier should be added after the delta symbol.

The Artifact Identifier:

The last portion of the number is to be a letter that identifies a specific artifact. The letters are to proceed in the following fashion: A to Z, AA to AZ, BA to BZ, CA to CZ and so forth to ZA to ZZ. At

this point the numbers would resume as AAA to AAZ, BAA to BAZ and so forth. The practice of omitting certain letters for archaeological purposes is to be maintained. The letters to be omitted are I, J, O, Z.

2.04. Artifacts must be labeled using permanent archival materials. The numbers placed on the artifact must be written in black ink directly on the artifact's surface. A clear or opaque white foundation coat may be applied, if necessary, provided that important information on the artifact is not obscured or covered. After the number has been applied, a second clear finish coat must be then applied over the number or number and foundation coat. The recommended materials for this are included in the supplies section.

2.05. Where direct labeling on the object is not feasible, the artifacts may be placed in an archival quality resealable bag with the provenience data placed on the exterior of the bag, and on a mylar or tyvec strip inserted inside the bag. All artifacts, which can not be labeled, must also be separated by material, class or type.

2.06. All diagnostic artifacts must be labeled whenever physically possible. If not appropriate, or feasible, the artifact(s), must be packaged in archival materials which are permanently labeled. The provenience/catalogue control number and provenience information must be placed on a mylar, or tyvec, tag that is to be inserted into the bag/container.

2.07. When certain less diagnostic artifact types occur in large quantities within a specific provenience, all specimens need not be individually labeled. Examples include, but are not limited to, shell, fire cracked rocks, flakes, window glass, nails, brick, mortar, plaster, slag, and coal. Exceptions to this general rule would include unusual specimens, or those determined to possess a particular research potential. These artifacts should be grouped by material, type, or class, and placed in a resealable plastic bag with the exterior permanently labeled with the provenience data. A mylar or tyvec slip label with the provenience information must be placed inside the bag containing these materials.

2.08. It is necessary that faunal remains from a specific provenience be bagged separately by zoological class, and in such a way as to prevent crushing of fragile remains. All faunal material which

can be physically labeled should be labeled. Bones too small for individual labeling should be placed in an archival resealable plastic bag, and the bag labeled with all required provenience data. A mylar or tyvec label, with all required provenience data, will also be inserted inside the bag.

2.09. Other material classes not appropriate for individual labeling, including, but not limited to, floral remains, soil samples, should be stored in suitable labeled containers and with a labeled mylar or tyvec strip placed inside.

3.00. DOCUMENTATION:

Associated Records

3.01. The associated records are integral components of an archaeological site collection. **All original associated records must be submitted with the artifact collection for permanent curation.** Computer generated records, such artifact catalogues, vessel lists, etc., must be first generation printouts and not photocopies of those documents. The submitted documentation must include, but is not limited to, the following record types:

Maps: Includes, but are limited to, survey maps, project area map, overall site maps

Unit and Feature Plans and Profiles

Field Records: Includes, but are not limited to, field journals, survey log books, notes, field observations

Field Catalogue Register: This sequential list records the provenience catalogue number(s) that have been applied to each specific provenience.

Laboratory Records: Includes, but are not limited to, processing logs, internal tracking documents, etc.

Analyses and Specialized Studies: This group includes analytical studies and reports, whether or not the data was used in the final report, and would include, but are not limited to, lithic analyses, ceramic minimum vessel estimates, soil chemistry reports, and oral history interviews.

Artifact Catalogue: The catalogue must include a listing of the artifacts by provenience/catalogue number with its specific provenience description. It is recognized that there are different levels of cataloguing. At a minimum, catalogues must include an identification of the object, appropriate measurements, its material of manufacture, and quantification (count and/or by weight), and a description of the artifact according to the best current levels of professional knowledge. Additional listings of artifacts which have been removed from and stored separately from the rest of the materials from their provenience unit need to be included.

Box Contents Index: This index records the number of the box which contains the artifacts from each provenience.

Conservation Records: Must include a statement indicating whether conservation treatment was performed, a list of those objects treated, the name of the conservator(s), and a complete description of the treatments employed. If the total artifact conservation was not completed, a list of those artifact(s) requiring immediate or further attention must be included.

Administrative Records and Correspondence: Includes modern, contemporary documentation relevant to the site/project, such as research design, scope of work, permissions, ownership documents, curatorial agreements, etc.

Historical Documentation: Copies of all historical research used in site documentation and analyses.

Final Report: Two bound copies of the final report must be submitted.

Illustrations

3.01.10. Quality copies of all artifact illustrations used in the report must be submitted.

Photography

3.01.10. A master set of permanent black and white photographs with negatives must be submitted. Grouped images on contact sheets are not acceptable as permanent record. This material must be on the best current standard films and archival papers.

3.01.11. Color slides should be unprojected originals. This material must be on the best current standard films.

3.01.12. All photographic materials should be minimally labeled with the site, provenience, and subject. This information must be placed on the on the back and written only in #2 pencil or in an archival ink. Do not use commercial felt tip or rollerball pen types.

3.01.13. A catalogue of all photographic materials with basic descriptions of each of the images must be included.

Electronic Media

3.01.15. Because electronic media is not a permanent record at the present time, it is to be included only as a compliment to the hard copy data that have been described above. All associated records and photography must deposited in human readable form.

3.01.16. Electronic data (tape, disks, etc.) are appropriate for use in recording site and collection data. If used, they must be accompanied by a statement describing the computer system, software used, and the contents of each disk, tape, or CD. Standardized methods for the storage of electronic data will likely be developed in the near future.

4.00 CONTAINERIZATION

4.01. All artifacts must be placed in archival quality stable storage containers for receipt by Delaware State Museums. The first, and most basic of these are polyethylene bags. These polyethylene bags must be reclosable and of **no less** than 4ml in thickness. Exceptionally large or unusually shaped artifacts may require different methods, but should be stored using only archival quality stable materials. Unusual situations must be brought to the attention of Museums' archaeologist for a determination of materials to be used.

4.02. The bags used for permanent storage must be clean, unused bags. Do not use bags previously used in the field, or for other purposes. Because bags used in the field have important provenience data on them, do not discard these bags. Instead, cut out the section with the provenience

data, and place inside a clean archival bag, and then place inside the box, or first box, that contains the materials from that particular provenience.

4.03. All artifacts must be ordered first by provenience and then sorted and bagged according to artifact material and class, or type. For example, all ceramics should be kept together, or all of the projectile points should be together, etc. Do not mix different types of metallic artifacts together. Separate each into their respective groups and bag separately.

4.03. Plastic bags should be perforated to allow air exchange and to inhibit the development of unwanted microenvironments. Use of non-perforated bags, however, may sometimes be appropriate for very climate sensitive artifacts that need special storage conditions, such as artifacts made of ferrous metals. Perforation, as intended here, is a small hole in the center of the bag about the diameter of a dissecting needle. This small diameter is adequate for the allowance of air exchange and the prevention of microenvironments. Do not use a hole punch of the type used on notebook paper. These holes may be too big and allow some artifacts to fall through.

4.04. All bags must be permanently labeled with the appropriate site number and provenience information. Bags are to be labeled with black permanent marker only. Do not use ball point or pencil for bag labeling.

Bags are to be labeled in the upper left hand corner with the following information in sequential order:

site number

provenience/catalogue control number

provenience description

See attached example page. Additional information can be added after these if, and when, necessary.

4.05. These same data must be also placed on a mylar or tyvec tag and placed inside the polyethylene bag.

4.06. For fragile or sensitive materials (i.e. C-14 samples, faunal and floral remains, etc.), standard sized glass or other archival containers labeled with the site and provenience data are to be used. Either clear or amber colored glass is permitted, but it is preferred that the caps be teflon (TFE) lined for

extra security against contamination. In the case of C-14 samples, they must be kept in the foil wrappers used during the recovery of the sample in the field, but these must be placed inside of a glass container to prevent crushing and contamination from exposure.

4.07. Artifact storage boxes must conform to the types established by Museums. The two principal types are:

1. Archaeological Flat, 20" x 20" x 3"
2. Paige/Hollenger Box, 15 1/2" x 10" x 12 1/2"
3. Human Remains Box, 31" x 24" x 6"

4.08. For large artifacts that will not fit into the above containers, other types of archival containers can be employed after consultation with Museums' archaeologist. There are several other types of archival containers that are available from conservation supply firms. The selection of an appropriate container will be based on the artifact type(s) and storage considerations.

4.09. The archaeological flats must be compartmentalized for the maintenance of provenience data and to prevent crushing. This is to be accomplished by the use of boxes of the following four sizes:

4.75 x 4.75 x 3

4.75 x 2.5 x 3

9.5 x 4.75 x 3

9.5 x 9.5 x 3.0

4.10. All archaeological flats and boxes must be labeled with the site and provenience information. Rather than direct marking of the box, an archival adhesive label or a transparent label holder with card should be affixed to the container is required. If it is found that some materials are higher than what can be accommodated by the archaeological flat, but rising no more than two inches above the box's edge, then angled props can be placed in each of the four corners to elevate the box lid over the artifact(s). These angled props must be made of an archival material and of the same durability and strength as the main box that is used to house the collection.

4.11. The collection must be ordered and boxed according to sequential provenience/catalogue control numbers. Proper ordering will aid in the retrieval of specific data. A listing of the specific proveniences and their numbers and their box location(s) must be included with the artifact catalogue.

4.12. Artifacts that have been placed into analytical groups (minimum vessels, smoking pipes, beads, projectile points, etc.) can be retained in their analytic groups and not returned to their original proveniences for storage. Notation should be made in the artifact catalogue that these artifacts are stored separately, and a separate inventory of these groupings should be placed on file in the associated records.

4.13. In ordering and packing storage boxes, good judgment needs to be exercised as to weight. A weight of twenty pounds (20 lbs.) per box should not be exceeded.

4.14. Materials used in specialized analyses must be bagged separately, but kept within their specific provenience location. Examples include, but are not limited to, projectile points used in blood residue analysis, ceramics sampled for sourcing studies, and charcoal utilized in species identification for paleoecological studies. This practice will aid in retrieval of samples for new and additional studies. The exception to this would be if these analyses are sizable or numerous. In which case they can be stored separately provided documentation has been provided which records their removal, separation, and location.

4.15. Flotation samples that have been sorted must be kept by taxonomic class, packed according to section , and placed with its provenience unit. If deemed appropriate, and present in a high volume, sorted flotation samples can be stored as group in separate containers. Information Flotation samples that are unprocessed will be stored separately. These samples must be stored in archival containers. Proper containers can be determined on an individual basis. Processed samples and analyzed samples can be stored with their specific provenience in a proper container.

4.16. Soil samples are to be stored in boxes separate from the main collection. These samples must be stored in archival containers. Proper containers can be determined on case by case basis, pending a curation assessment. The approved containers must be permanently marked with in archival marker and all required provenience information.

5.00. PREPARATION, SHIPPING, AND ACCEPTANCE OF COLLECTIONS

5.01. After the submission of the final report to the DE SHPO, Museums' archaeologist must be contacted to begin the preparations for transport of the site collection, or site collections, to an official repository. The initiation of the process of the transfer of site collections must begin within two weeks (ten working days) of the submission of the final report.

The first step in this process is to request a copy of the Archaeological Collection Resource Checklist. The checklist sheets are used as a guide to ensure that all required materials related to a site's collection are present and in order. Upon request, this checklist will be mailed by Museums' archaeologist.

5.02. Once the checklist has been completed, it must be **mailed** back to Museums' archaeologist for review. Museums' archaeologist will have no more than two weeks (ten working days) from the date of receipt to respond. Any questions or other issues will be addressed to the consultant during the review period. Museum's archaeologist will contact the consultant to make shipment arrangements and select a date of shipment.

5.03. On the day of delivery, boxes containing site materials must arrive clean, dry, and free of any and all contamination. All boxes must be clearly marked and of the proper weight described above. The associated records must be organized, but not placed in archival materials. Museums' curatorial staff is responsible for that task.

5.04. At the time of delivery, an audit will be performed that will include an examination of all associated records, and a random selection of the boxes containing the artifact collection. Site collections found lacking associated records and documentation, portions of the collection, or improperly ordered and boxed will not be accepted and will be returned for remedial processing by the qualified professional.

5.05. Site collections must be physically transported to Museums' storage facility by the consultant. In some circumstances, Museums' curatorial staff may pick them up. Under **no** conditions

are site collections and associated records to be sent through the United States postal system or delivered by commercial delivery systems.

6.00 SOURCES

6.01. Museums' archaeologist maintains an active file on curation supplies and suppliers. Files are also maintained on conservation and curation procedures and the many developments and changes that occur in those fields. Information on recommended items and materials can be provided.

6.02. It is recommended that, prior to purchase of any materials, consultants check with Museums' archaeologist to verify if a particular item, or product, meets Museums' curation requirements.

7.00 CONTACT FOR INFORMATION

7.01. Notification of changes and revisions will be addressed through the periodic issue of *Curation Circulars*. These circulars will apprise consulting firms of any changes in the *Guidelines and Standards*, new methods in archaeological curation, or other issues relevant to the proper care and management of Delaware archaeological collections in particular and archaeological collections in general.

7.02. Questions regarding curation policies and procedures, and transfer of collections should be directed to the archaeologist for Delaware State Museums.

ARCHAEOLOGICAL SITE COLLECTION INVENTORY

Site No./Name: _____

Project: _____

Agency/Firm: _____

Field/Excavation Records:

Survey Maps _____

Site Maps _____

Excavation Units: Plans _____ Profiles _____

Feature Drawings: Plans _____ Profiles _____

Field Notes _____

Field Journal _____

Photographic Resources:

B/W Prints _____

Negatives _____

Color Slides (unprojected originals) _____

Video Tape _____

Electronic Media: _____

Other Documentation: _____

1.

Artifact Collection/Collection Records (Original):

Artifact Catalogue _____

Laboratory Records _____

Analyses _____

Conservation Records _____

Special Conditions _____

Other _____

Artifact Illustrations _____

Final Report (2 copies: 1 bound, 1 unbound) _____

Volume: Flats _____ Storage Boxes _____ Non-Standard Boxes _____

Estimated Cubic Footage: Records _____ Collection _____

(Staff use only)

Collection Inspection and Audit

Date of Delivery _____

Associated Records _____

Sample of Collection _____

Notes/Comments:

Agency/Firm Representative: _____ **Date** _____

DSM Archaeologist: _____ **Date** _____