Cataloging provides the key for physical and intellectual access to museum property and is an integral part of museum property management. Cataloging obtains information from accession records, associated documentation, physical description, and interpretative research about museum property. Cataloging encompasses several steps in the process of establishing accountability for, and access to, museum property. Accessioning is the first step in achieving accountability. The next step involves completing the catalog record. The cataloging process assigns an identifying catalog number to each object or specimen, or group of objects or specimens that are lot cataloged (see Appendix E). The unique catalog number is placed directly on the museum property, or on a label attached to the objects or specimens. This number is the key connecting object or specimen information directly with the actual object or specimen.

Bureaus should provide guidelines for a bureauwide cataloging system and approve the cataloging system in use at each unit. The required components of a cataloging system are identified in this Chapter. Bureau museum property must be documented with mandatory data described in this Chapter. It is strongly recommended that mandatory data be supplemented with data appropriate to the discipline selected from the "Highly Recommended Data" Section in the Optional Data Appendices M and N.

A. PROCEDURES FOR CATALOGING

The following are components of a cataloging system.

1. The Catalog Record

The completion of a catalog record is mandatory for each object or specimen or group of objects or specimens, as appropriate to the discipline. The catalog record may be as valuable as the museum property itself and may outlast the object or specimen. The catalog record constitutes the primary property and collection management record of museum property. The catalog record serves as an index to additional sources of information and facilitates physical and intellectual access to museum property. The catalog record includes data that enable the bureau or unit to generate a variety of reports by data categories.
Chapter 3 Cataloging

(e.g., catalog number, discipline, or storage location). Catalog records may vary from discipline to discipline.

Information recorded on the catalog record is gathered from the accession book, accession receiving report, associated documentation, careful study of the physical make-up of the object or specimen, label information, reading, and research. Museum property should be cataloged, as appropriate to the discipline, as soon as possible after being received. Accuracy, thoroughness, and attention to detail are crucial. Terminology and format should be uniform and understandable. Inaccurate or incomplete cataloging not only results in inadequate museum property records, but can also cause confusion in later years.

Not every object or specimen will be sufficiently documented to allow completion of all categories of information. Before cataloging is considered complete, however, all available and appropriate information should be entered on the catalog record. Complete only those blocks for which there is known information. Cataloging information should be on the front of a catalog card only, and no more than one card should be used to catalog an object or specimen or lot. If additional information is available, place it in the accession folder or, if there is considerable supplementary information for that object or specimen, establish a catalog folder and place the information there.

Units may choose to keep a bound record book (similar to the accession book) of catalog numbers, as they are assigned. This practice will reduce the likelihood of duplicating entries or assigning duplicate numbers.

2. Catalog Folder

When the accession folder cannot accommodate all the associated documents for all the museum property in an accession, a catalog folder should be established for each object or specimen with extensive data. The catalog folder is an acid-free folder with the catalog number printed in carbon-based India ink on the tab. The
Chapter 3 Cataloging

catalog folder should be filed in a separate drawer, but in the same insulated locking file or safe as the accession file. When a catalog folder is established, the proof of ownership and accession-related documentation is left in the accession folder and catalog folders are cross-referenced. Contents of a catalog folder may include information relating to the object or specimen itself on an individual basis, such as the following:

- research report
- object treatment requests, condition reports, and treatment proposals
- chemical analysis
- appraisals
- summaries of stories and/or traditions
- publicity photographs
- material samples

3. Report Generation

The catalog system should be designed to enable the unit or bureau to readily create, at a minimum, the information required for the annual Museum Property Survey Report (411 DM 3.3B). In addition, the system should enable the unit or bureau to generate the following lists:

- list of objects and/or specimens by catalog number
- list of objects and/or specimens cataloged by discipline and by object or specimen name
- list of objects and/or specimens by source of accession (e.g., donor or collector)
- list of objects and/or specimens by location

Any computerized catalog recordkeeping system should be able to sort and organize data by any of the categories on the catalog record.

4. Backup of Catalog Records

The original of the catalog record is kept in the unit.
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The bureau should establish a procedure for generating and storing duplicates of all catalog records at a site other than the unit. This backup system may involve a central file, or regional or area files. The backup copies of catalog records should be in hard copy, such as paper microfiche or equivalent, if the other copies are computerized, but may be supplemented by electronic media. Storage for these records must meet the standards for documentation, storage, and preservation as stated in the Departmental "Checklist for Preservation, Protection, and Documentation of Museum Property." Refer to Volume I of this Handbook, Appendix E, for a copy of the Checklist.

5. The Catalog Work Sheet

Information may be entered by hand on an optional catalog worksheet then transferred to the catalog record. After the final catalog record is produced, proofread, and filed, the work sheet may be either discarded or placed in the catalog folder.

B. MANDATORY CATALOG DATA

1. Cultural Resources

The following catalog data are mandatory for inclusion on the catalog record for cultural resources. All categories must be completed providing that the information is appropriate to the object and available through observation or associated documentation. Information that is not available or applicable must be entered as "unknown" or "Not Applicable". Highly recommended and optional data are found in Appendix M.

a. Listing of Mandatory Catalog Data for Inclusion on all Catalog Records

! Accession number

! Catalog number
Chapter 3 Cataloging

! Discipline classification type
! Object and/or specimen name
! Unit acronym and/or identifier
! Controlled property
! Item count:
  Item count
  Lot
  Bulk item count
! Current location
! Description
! Condition
! Date cataloged

Additional mandatory catalog data for Archeology:

! Site of original collection and/or provenience:
  Field site number
  State site number
  Site name or other identification
  Within-site provenience
  UTM Coordinates, or
  Latitude and longitude, or
  Township/range/section
  Collection unit
  Place name
  County
  State
  Country

b. Data Definitions

**Accession Number**

The accession number is the unique sequential number assigned to the object or group of objects within a
single transaction. This accession number is found both in the accession and catalog records as it is the cross referencing key for information.

**Catalog Number**

The catalog number is a sequential and unique number assigned to the object or object lot and applied directly to the museum property. Component part(s) of objects are cataloged as a single unit and given one catalog number, such as a coffee pot and lid. The number may have letters (i.e., 101a, 101b, et seq.) added as a suffix to identify the component parts. Objects with component parts are considered a single item or unit. Pairs and sets, in which all parts are nearly identical, may also be assigned the same catalog number and a lower case letter given to each separate piece.

**Condition**

Condition may include an assessment of completeness of the object as well as its stability.

**Controlled Property**

The following property is considered controlled: An individual object or specimen or a cataloged "lot" of objects and/or specimens that is especially sensitive; has high intrinsic or scientific value; is especially vulnerable to theft, loss, or damage; is a short-term incoming loan; or is valued at or over a specific threshold amount established by the bureau. Museum firearms are considered controlled property.

**Current Location**

The storage location should be the current physical storage or exhibit location of the object in the unit, progressing from the most general location to the most specific (e.g., building number, room number, cabinet number, and/or shelf number). The development of a systematic location chart will assist in ready physical
access to objects. If one is already in existence, it should be updated and copies may be posted in the workroom and storage area, and a copy filed in the insulated file. The location chart should consist of a map of each separate structure housing museum objects, identifying each room or area by appropriate letter and/or number, including exhibit cases. Storage units (e.g., cabinets and cases) should also be mapped, identifying each unit by appropriate letter and/or number.

This entry is not to be confused with the location where the object was collected. If the object is temporarily moved from its location see instructions in Chapter 4, Section B, "Documenting Museum Property Location."

**Date Cataloged**

Indicate the date the object was cataloged.

**Description**

Provide a brief written description of observable information. This may also be used to record and preserve the relationship between museum property (e.g., photographs in a series). Cross-reference to other catalog numbers may be necessary.

**Discipline Classification Type**

The discipline classification type may include but is not limited to the following: archeology, Native American (ethnographic), artwork, historic object collections, and historical and/or scientific document collections. Refer to Appendix D.

The classification system is a method of organizing vast bureau collections into separate disciplines, and establishing guidelines within each discipline for ordering and organizing museum property data.

Each subcategory of the classification system records essential sets of information, placing the museum
property within a disciplinary framework. Bureaus should standardize subcategories.

**Item Count**

The item is quantified as follows:

**Item Count**

For a single object a 1 is indicated for item count, even if the museum property has component parts. For example, 1 would be the item count for a teapot with a lid or for a pair of gloves.

**Lot**

If the object is lot cataloged (see Appendix E), the total number of objects in the lot should be entered. For 150 lot cataloged buttons, the count would be 150, for 10 lot cataloged teapots with lids the count would be 10.

**Bulk Item Count**

For bulk objects, a count of the number of units that correspond to the unit of measure should be listed. Indicate the type of bulk unit (e.g., box or linear feet).

**Object and/or Specimen Name**

Provide the name of the object or specimen and, if applicable, name modifier based on discipline-specific instructions. An object or specimen name may consist of a noun and modifier (e.g., bed, trundle or jar, seed). Both the generic name and regional or aboriginal name(s) for the item should be recorded.

**For Archeology:**

**Site of Original Collection and/or Provenience**
Chapter 3 Cataloging

Record the location where an object was originally collected as documented by the original collector. For archeology, record the site and level at which an archeological object was recovered; for historic objects and Native American material, provide the specific location where the object was originally collected or acquired if available. Record all available information regardless of specificity.

! Field Site Number

Record any field number other than the state site number assigned to an archeological site by the investigator during the time that the object was recovered.

! State Site Number

For archeological objects only, the official state site number assigned to the site within the relevant state archeological inventory should be documented. Either the Smithsonian trinomial or value associated with the relevant state site numbering system (e.g., CA-MRN-14) may be used.

! Site Name or Other Identification

Record the distinctive name systematically assigned to the site from which archeological material was recovered (e.g., Flowerdew Hundred). This information is provided by the archeologist or investigator. For other cultural material, include data not already documented (e.g., Keams Canyon Trading Post).

! Within-Site Provenience

The within-site provenience for Archeology (e.g., Trench II, Level 3) documents information on spatial field collection (i.e., horizontal and vertical locations as provided by the archeologist).
! UTM Coordinates

The UTM (Universal Transverse Mercator Grid) coordinates or locational collection data should be documented if this information is provided by the collector. UTM coordinates are available for terrestrial and submerged locations. UTM coordinates contain three values. Zone number, easting, and northing make up the complete UTM grid reference which is used to identify a single point at the approximate center of a resource location. Include the unit of measurement, which is usually meters but may be kilometers (e.g., UTM Zone = 17, Northing = 4264000N, Easting = 291000E).

! Latitude and Longitude

Record the standard latitude and longitude for the collection site if this information is provided by the collector (e.g., Latitude 38° 30' 15"N/Longitude 85° 14' 30"W).

! Township, Range, Section

Record Township, Range, and Section for the collection site if this data is provided by the collector (e.g., T20N R118W Sec. 5).

! Collection Unit

If collected in the unit, enter the unit (acronym or identifier) in which the object(s) was collected.

! Place Name

Indicate the place name and modifiers (e.g., Apache Wells), or the city or town as recognized by the U.S. Postal Service.

! County

Name the county and/or parish unit. Use only data
Chapter 3 Cataloging

provided by the collector or investigator.

! State

Indicate the state from which the object was originally collected or archeologically recovered. For objects collected in the United States, the US Postal Code (e.g., CA for California) may be used. Refer to Appendix F of this Handbook.

! Country

For historical collections and Native American collections, the appropriate political or geographical entity from which the object was originally collected should be noted. Name the intact legal jurisdiction area that corresponds to the area at the time of collection. Always indicate USA if the object was documented as being collected within the United States of America.

Unit Acronym and/or Identifier

Record the identifying acronym or identifier which specifies the unit holding and/or cataloging museum property.

2. Natural History

The following catalog data are mandatory for inclusion on the catalog record for natural history. All data must be completed provided that the information is appropriate to the discipline and available through observation or associated documentation. Information that is not available or applicable must be entered as "unknown" or "Not Applicable". Highly recommended and optional data are found in Appendix N.

a. Listing of mandatory catalog data for inclusion on all catalog records.

! Accession number
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! Catalog number (including component part)
! Discipline and classification type
! Object and/or specimen name
! Unit acronym and/or identifier
! Controlled property

! Item count:
  Item Count
  Lot
  Bulk item count

! Current location
! Description
! Condition
! Date cataloged

Additional mandatory catalog data for Natural History Specimens:

! Type specimen (if designated)

! Collection locality
  Collection locality name
  UTM coordinates, or
  Latitude and longitude, or
  Township/range/section
  Collection unit
  Place name
  County
  State
  Country

! Collector
! Collector's number
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! Collection date

! Preservative and/or preparation

b. Data Definitions

**Accession Number**

The accession number is the unique sequential number assigned to the specimen or group of specimens within a single transaction. This number is found in the accession and catalog records as it is the cross referencing key for information.

**Catalog Number**

The catalog number is a sequential and unique number assigned to the specimen or specimen lot and applied directly to the specimen or to a label on the specimen. Component part(s) of specimens (e.g., a skin and a skull) are cataloged as a single unit and given one catalog number. The number may have letters (i.e., 10a, 10b, et seq.) added as a suffix to identify the component parts.

**Collector**

Record the full name of the person who made the collection (e.g., Merriam, C. Hart).

**Collection Date**

Record the date on which the specimen was collected. Record the date in a standardized order designed by the bureau (e.g., MM/DD/YYYY, 04/23/1992). **NOTE:** This is not to be confused with the accession date.

**Collection Locality**

Provide data on the locality where the specimen was collected as follows:
! Collection Locality Name

Identify and describe the collection site as provided by the collector (e.g., Jones River, 2.1 km West of Highway 12). For paleontology and geology specimens, record the collecting locality or the excavation site name and number. Other names of the site in which the specimen was collected may be provided.

! UTM Coordinates

UTM (Universal Transverse Mercator Grid) coordinates or locational collection data should be documented if this information is provided by the collector. UTM coordinates are available for terrestrial and submerged locations. UTM coordinates contain three values. Zone number, easting, and northing make up the complete UTM grid reference which is used to identify a single point at the approximate center of a resource location. Include the unit of measurement, which is usually meters but may be kilometers (e.g., UTM Zone = 17, Northing = 4264000N, Easting = 291000E).

! Latitude and Longitude

Record the standard latitude and longitude for the collection site if this information is provided by the collector (e.g., Latitude 38° 30' 15"N/Longitude 85° 14' 30"W).

! Township, Range, Section

Record the township, range, and section for the collection site if this data is provided by the collector (e.g., T20N R118W Sec. 5).

! Collection Unit

If collected in the unit, enter the unit (acronym or identifier) in which the specimen was collected.

! Place Name
Chapter 3 Cataloging

Indicate the place name and modifiers (e.g., Button Willow Wells) or the city in which the specimen was collected.

! County

Name the county, parish, or other legal jurisdictional unit in which the specimen was collected.

! State

Name the state in which the specimen was collected.

! Country

Record the appropriate name of the political or geographical entity from which the specimen was originally collected. The appropriate entity should be contemporaneous with the time in which the specimen was collected. Enter USA if the specimen was documented as being collected within the United States.

Collector's Number

Note the number if assigned by the collector. These numbers should also appear on the specimen label.

Condition

Condition may include an assessment of completeness of the specimen as well as its stability.

Controlled Property

The following property is considered controlled: An individual specimen or a cataloged "lot" of specimens that is especially sensitive; has high intrinsic or scientific value; is especially vulnerable to theft, loss or damage; is valued at or over a specific threshold amount established by the bureau. Type specimens are considered controlled property. For the purpose of inventory short-term incoming loans are treated like controlled property.
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Current Location

Record the current physical storage or exhibit location of the specimen in the unit, progressing from the most general location to the most specific (e.g., building number, room number, cabinet number, and/or shelf number). The development of a systematic location chart will assist in ready physical access to specimens that will be updated as specimens are moved. Storage units, cabinets and cases, should be mapped and configured to facilitate accessibility (e.g., specimens stored by species). Each storage unit should be identified by a letter and/or number.

NOTE: This entry is not the location where the specimen was collected. If the specimen is temporarily moved from its location, see instructions in Chapter 4, Section B, "Documenting Museum Property Location."

Date Cataloged

Indicate the date (where appropriate) the specimen was cataloged.

Description

Provide a brief description of observable information.

Discipline Classification Type

The discipline classification type may include, but is not limited to, the following: biology, paleontology, or geology. Refer to Appendix A.

The classification system is a method of organizing vast Bureau collections into separate disciplines, and establishing guidelines within each discipline for ordering and organizing museum property data.

Each subcategory of the classification system records essential sets of information, placing the museum property within a disciplinary framework. Bureaus should standardize subcategories.
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Item Count

The item is quantified as follows:

! Item Count

A single specimen in the item count will be 1, even if the museum property has component parts. For example, 1 would be in the Item Count for a mouse skeleton or for a dip net sample.

! Lot

If the specimen is lot cataloged, document the total number of specimens in the lot. For 150 lot cataloged butterflies, the count would be 150.

! Bulk Item Count

For bulk specimens, a count of units that corresponds to the unit of measure should be listed. Indicate the type of bulk unit (e.g., box or vial).

Preservation and/or Preparation

Record how the specimen was preserved or prepared for curation.

Object and/or Specimen Name

Record the scientific name using the following hierarchy as appropriate: Phylum, Division, Family, Genus, and Species.

Type

Indicate if the specimen has been recognized in publication as a "type specimen." Describing and designating types is the function of the discipline specialist. Include detailed information about a type specimen. The following list of abbreviations developed
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by the Smithsonian Institution may be selected.

LE  =  LECTOTYPE
C   =  COTYPE
NE  =  NEOTYPE
HO  =  HOLOTYPE
IL  =  ISOLECTOTYPE
IS  =  ISOSYNTYPE
SY  =  SYNTYPE

These types are designated only by discipline specialists in the course of their scientific description of species. The designations may be used by curatorial staff to signal management requirements specific to type specimens. Refer to discipline-specific texts for definitions.

Unit Acronym and/or Identifier

Record the identifier or acronym specific to the unit holding and/or cataloging museum property.

C.  RECOMMENDATIONS ON COMPLETING THE CATALOG RECORD

Mandatory data vary between cultural collections and natural history collections, though many required data are identical. Separate lists of mandatory data are provided for cultural resources and natural history resources. For additional information, refer to Appendix D, "Classifying Different Types of Museum Property." Additional optional catalog data for cultural and natural resources are found in Appendices M and N.

Care should be taken to document information about museum property consistently to ensure efficient information capture and retrieval, and for future bureauwide data aggregation.

Mandatory data must be completed only when the required information is available. For example, with regard to a
natural history catalog record, researchers may use either UTM coordinates, longitude and latitude, or township/range/section; only one of these fields should be completed. With regard to a cultural catalog record, the artist/maker or site of origin may not be known, or there may not be any eminent figure association in which case "N/A" or "unknown" should be indicated. Only reliable and verifiable information should be entered into the catalog card. Refer to Figure 3.1 and 3.2, Sample Catalog Records.

D. CATALOG NUMBERS ISSUED IN GROUPS

Although not a preferred practice, in order to facilitate cataloging of materials that have been collected under contract or permit, it may be necessary to release catalog numbers for use by individuals other than curatorial staff. In order to request catalog numbers, the contractor or other individual should provide a fairly exact listing of what needs to be cataloged. Catalog numbers should be released only to individuals with knowledge of the bureau's cataloging system, as proper lot identification and quantification should be taken into account in assigning catalog numbers. Contractors and permitees should be provided with documentation on bureau cataloging standards as part of the contracting or permit-granting process. Catalog numbers may not be released prior to collecting, or before the collector is able to quantify material adequately. Records should be kept to track the catalog numbers issued to each accession; this can be accomplished by using a catalog number logbook, or by other means. Unit staff should follow-up to ensure that all numbers released have been used and properly assigned, and that corresponding records are entered into the unit's museum property recordkeeping system.

E. PHOTOGRAPHY AS AN IMPORTANT SUPPLEMENT TO CATALOGING

1. Uses of photography

The oft-quoted, "A picture is worth a thousand words," is especially true in the cataloging process. Narrative
description of texture, color, marks, damage, and materials is difficult. Some of these qualities can be illustrated by a good photograph. The photograph and the narrative description of an object are complementary. Both are necessary for a quality description of an object. Beyond the overall description, the written description may be limited to details that are not apparent in the photograph.

All controlled property should be photographed. For other material, a photograph is recommended but less critical. The cataloger should decide if a photograph is useful. Some of the primary reasons to photograph museum property are to:

- aid in description (especially of complex objects)
- record condition
- aid recovery (if the museum property was stolen)
- aid in research (in many cases photos can be used for initial research, eliminating the need to handle the object)
- record additional dimensions without measuring by using a scale in the photo.

2. Basic standards

Standardization of the photographic techniques used in the units to document museum property is highly desirable. Detailed guidance on photographing objects is provided in Appendix I, "Photography." The basic standards are described below.

a. 35mm black and white, fine-grained film is the generally accepted standard for museum documentation. When color is important, a second photograph, in color, is recommended.

b. The catalog number, roll number, color control patches (for color photos), and metric measurement scale should be photographed with each object.

c. At least one print, either a 3"x5" or a contact print, should be made for the photo file.
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d. The print should be attached to a photograph file card.

e. The catalog number and the negative roll and frame number should be recorded. These records may be filed in the unit museum property index file, directly behind the catalog card for that object, or filed in a separate file.

f. The roll number and catalog number appear in the photograph, and the frame number appears on the negative. These numbers serve as identification. Negatives are filed in archival quality polyethylene holders and placed in a three-ring binder. The binder should be stored with the museum records.

g. The number of photographs per object or specimen depends upon the judgment of the cataloger. For some objects, one overall picture is sufficient. For some items, an overall view should be supplemented by additional close-ups of significant details.

F. LIST OF FIGURES

3.1 Sample Catalog Record for Natural History Specimens
3.2 Sample Catalog Record for Cultural Resource Objects
### Chapter 3 Cataloging

<table>
<thead>
<tr>
<th>Discipline Classification Type</th>
<th>Accession Number</th>
<th>Catalog Number</th>
<th>Kingdom, Phylum or Division, and Family</th>
<th>Controlled Property</th>
<th>Catalog by</th>
<th>Date Cataloged</th>
<th>Collector's Number</th>
<th>Identified By</th>
<th>Date Identified</th>
<th>Cataloged By</th>
<th>Date Cataloged</th>
<th>Depository Library Call Number</th>
<th>Description</th>
<th>Collector</th>
<th>Collection Date</th>
<th>Collector</th>
<th>Identified By</th>
<th>Date Identified</th>
<th>Cataloged By</th>
<th>Date Cataloged</th>
<th>Depository Library Call Number</th>
<th>Description</th>
<th>Collector</th>
<th>Collection Date</th>
<th>Collector</th>
<th>Identified By</th>
<th>Date Identified</th>
</tr>
</thead>
</table>

For Natural History additional mandatory catalog data:

- **Type**
- **Voucher**

- **Collection Locality**
  - **Collection Locality Name**
  - **County, State, Country**

- **Collection Site Reference (use one):**
  - Township/Range/Section
  - Latitude and Longitude
  - UTM Coordinates

- **Depositional Environment**
  - **Formation**
  - **Geological Period**
  - **Elevation**
  - **Waterbody or Drainage**
  - **Depth**
  - **Preservation Priority**
  - **Preservative and/or Preparation**

- **Lot**
- **Bulk Bin Count**
3.1 Sample Catalog Record for Natural History Specimens
## 3.2 Sample Catalog Record for Cultural Resource Objects
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