



# DAACS Cataloging Manual: General Artifacts

LAST UPDATED: JUNE 2024

DAACS Cataloging Manual: Buckles © 2024 is licensed under  
[CC BY-NC-ND 4.0 Deed](#) | [Attribution-NonCommercial-NoDerivs 4.0 International](#) | [Creative Commons](#)



*DAACS Cataloging Manuals document how artifacts, contexts, features, objects and images are cataloged into the DAACS database. They provide information not only about artifact identification but also about how each database field is used and how data should be entered into that field.*

*The DAACS database was developed by Jillian Galle and Fraser Neiman, in collaboration with members of the [DAACS Steering Committee](#). Jillian Galle and DAACS Staff, Leslie Cooper, Lynsey Bates, Lindsay Bloch, Elizabeth Bollwerk, Jesse Sawyer, and Beatrix Arendt, led the development of cataloging protocols. In addition to DAACS staff and steering committee members, Monticello current and former Archaeology Department staff, Fraser Neiman, Jennifer Aultman, Sara Bon-Harper, Derek Wheeler, Donald Gaylord, Karen Smith, and Nick Bon-Harper also contributed to the development of cataloging protocols. Jennifer Aultman and Kate Grillo produced the initial versions of these DAACS manuals in 2003. The manuals have been substantially revised by DAACS staff in the intervening years.*

*This manual was substantially revised for the introduction of the Bronze, Silver, and Gold cataloging tiers in 2022, and in preparation for the new website launch in 2024. These revisions were made by Galle, Bloch, Bollwerk, and by DAACS analysts Iris Puryear, Allison Mueller, and Cate Garcia.*

*This manual was last updated: June 2024.*

## Contents

1. The DAACS Database .....	7
2. About the General Artifacts Module.....	7
3. About the General Artifacts Manual.....	8
3.1. Comparison of Attributes recorded for Bronze, Silver, and Gold Cataloging Levels .....	8
4. Bronze Level Cataloging Protocols .....	10
4.1. Bronze Overview .....	10
4.2. Bronze Batching Protocols.....	11
5. Silver Level Cataloging Protocols.....	11
5.1. Silver Overview.....	11
5.2. Silver Batching Protocols .....	13
6. Gold Level Cataloging Protocols .....	13
6.1. Gold Overview .....	13
6.2. Gold Batching Protocols .....	15
7. General Artifact Field Definitions and Protocols .....	17
7.1. Main Table.....	17
7.1.1. Artifact Count .....	17
7.1.2. Category .....	17
7.1.3. Form .....	17
7.1.4. Brick Color .....	17
7.1.5. Completeness .....	17
7.1.6. Mended? .....	18
7.1.7. Decoration?.....	18
7.1.8. Coin Date .....	18
7.1.9. Glass Color .....	18
7.1.10. Window Glass Finished Edge?.....	18
7.1.11. Window Glass Edge Angle .....	18
7.1.12. Material and Manufacturing Technique .....	19
7.1.13. Notes .....	19
7.2. Measurements Table .....	19
7.2.1. Length, Width, and Height .....	19
7.2.2. Weight.....	20
7.2.3. Diameter .....	20

7.2.4. Brick Size*	20
7.3. Nail Information Table	20
7.3.1. Nail Head	20
7.3.2. Nail End	20
7.3.3. Nail Modification	21
7.3.4. Nail Length	21
7.4. Decoration Table	21
7.4.1. Marks	21
7.4.2. Marks Notes	21
7.4.3. Decoration Technique	21
7.4.4. Applied Color	21
7.4.5. Decoration Notes	22
7.5. Condition Table	22
7.5.1. Burned?	22
7.5.2. Post-Manufacturing Modification?	22
7.5.3. Conservation?	23
7.6. Images	23
7.7. Objects	23
8. Cataloging Protocols for Common General Artifacts	24
8.1. Glass Artifacts	24
8.1.1 Lamp Chimney	24
8.1.2. Window Glass and Various Types of Flat Glass	24
8.2 Metal Artifacts	27
8.2.1. Aluminum Foil	27
8.2.2. Bridle Bits	28
8.2.3. Coins	31
8.2.4. Corrosion/Rust	32
8.2.5. Escutcheons and Keyhole Covers	32
8.2.6. Grommets	32
8.2.7. Guns and Gunparts	33
8.2.8. Hardware	40
8.2.9. Horseshoes	41
8.2.10. Lead Shot	41

8.2.11. Bullets and Bullet Casings.....	44
8.2.12. Nails/Spikes .....	44
8.2.13. Corroded Metal, Likely Nail .....	50
8.2.14. Nail Waster .....	50
8.2.15. Nail Rod .....	52
8.2.16. Sheeting.....	52
8.2.17. Straight Pins.....	52
8.2.18 Strapping and Hoop Iron .....	53
8.2.19. Tools .....	53
8.2.20. Tack, Unidentified .....	54
8.2.21. Tack, Upholstery .....	54
8.2.22. Hook, Clothing and Eye, Clothing.....	55
8.2.23. Fastener, Corset .....	55
8.2.24. Unidentifiable Fragments .....	56
8.2.25. Wire .....	57
8.2.26. Furniture Casters .....	57
7.2.27 Window Came.....	58
8.2.28. Tenterhooks .....	60
8.3. Architectural Materials .....	61
8.3.1 Brick, Daub, and Chinking.....	61
8.3.2. Roof and Floor Tiles.....	66
8.3.3. Plaster and Mortar.....	68
8.3.4. Cement and Concrete .....	74
8.4. Miscellaneous Artifacts .....	75
8.4.1. Gastroliths.....	75
8.4.2. Marbles, toy .....	75
8.4.3. Modern Artifacts .....	76
8.4.4. Musical Instruments .....	77
8.4.5. Pencils .....	77
8.4.6. Pigment, Unprocessed .....	78
8.4.7. Scrap/Waste .....	78
8.4.8. Casting Waste.....	78
8.4.9. Slag.....	79

8.4.10. Window Glazing .....	80
8.4.12 Shoe Parts: Metal, Leather, and Rubber .....	80
8.4.13. Parasol/Umbrella Parts .....	82
8.5. Organic Artifacts .....	84
8.5.1. Miscellaneous organic.....	84
8.5.2. Beans.....	85
8.5.3. Charcoal .....	85
8.5.4. Cinder .....	85
8.5.5. Coal .....	86
8.5.6. Corn Cob and Corn Kernel.....	86
8.5.7. Eggshell .....	86
8.5.8. Mud Wasp Nest.....	86
8.5.9. Nuts .....	87
8.5.10. Pits.....	87
8.5.11. Seeds.....	87
8.5.12. Shell.....	87
8.5.13. Blank, Button.....	87
8.5.14. Wood .....	88
8.6 Stone/Mineral Artifacts.....	88
8.6.1. Ferricrete/Bog Iron .....	88
8.6.2. Miscellaneous Rocks .....	89
8.6.3. Petrified wood .....	90
8.6.4. Slate.....	90
8.6.5. St. Bee's Sandstone.....	92
8.6.6. Red Sandstone .....	92
8.6.7. Bluestone .....	93
8.6.8. Tuff, Differentially Crystallized .....	93
8.7. Flotation Samples (Micro-artifacts) .....	93

## 1. THE DAACS DATABASE

The DAACS database was designed by Galle and Neiman in 2001, with direct input from the DAACS Steering Committee and collaborating institutions. The large relational database is programmed in PostgreSQL and comprises over 200 related tables. This structure instantiates the protocols and standards outlined in the DAACS manuals. The database is linked to a Ruby-on-Rails web-based interface, which allows DAACS Research Consortium (DRC) members to access the database through a web browser with a login from anywhere with an internet connection. For a detailed summary of the DAACS database and history of DAACS, please see Galle, Bollwerk, and Neiman 2019.

In 2018, a major grant from the National Endowment for the Humanities' Digital Humanities Division provided funds to develop a tiered cataloging interface that would allow DRC users to engage with the database on a variety of levels while retaining the data standards and integrity built into the original system. This new interface, with its Bronze, Silver, and Gold tiers, went live in March 2022. This project was a collaboration between DAACS, The University of Virginia's Institute for Advanced Technology in the Humanities, and Convoy.

## 2. ABOUT THE GENERAL ARTIFACTS MODULE

The **DAACS General Artifacts Module** provides a catch-all cataloging schema for all artifacts not included in the Bead, Buckle, Button, Ceramic, Faunal, Glass Vessel, Lithic, Tobacco Pipe, or Utensil Modules. The module is designed to capture the essential attributes of a wide variety of artifacts, such as form, material, manufacturing technique, and size measurements. Common types of artifacts included in the General Artifacts Module include architectural materials, hardware, arms and ammunition, and botanical materials.

Note that General Artifacts are defined by form rather than material type. There are many cases where material types overlap between the General Artifacts module and the other artifact modules. For instance, window glass should always be entered into the **General Artifacts** module. Even though there is a **Glass Vessel** module for the entry of glass artifacts, it is intended only for vessels such as tablewares and bottles. Likewise, ceramic fragments of floor and roofing tiles, porcelain dolls, and ceramic marbles and doorknobs should be entered into the **General Artifacts** module, while ceramic vessels such as plates or mugs should be entered into the **Ceramics** module. Finally, the **Lithics** module is designed to collect information about knapped and ground stone objects and the debitage that results from their production. Architectural elements made of stone should all be cataloged as **General Artifacts**. This includes objects like slate roofing tiles, marble elements, sandstone or limestone blocks, and architectural debitage. **General Artifacts** also includes all stone fragments that lack obvious evidence of human modification (entered using size classifications: granule, pebble, cobble, boulder), including those which are cataloged as quarried because the type of stone does not naturally occur in the area of the site. Entering both modified and natural stone into the

General Artifacts module allows all potential architectural materials to be captured in one place. Additionally, writing slate and slate pencils are cataloged in the General Artifacts Module.

Another possible point of confusion is the relationship between the **General Artifacts** module and the **Faunal** module. Ecofacts such as shell and eggshell are cataloged into the **General Artifacts** module, while mammal, fish, and reptile bones are cataloged into the **Faunal** module. Finally, all botanical artifacts, such as seeds, pits, beans, and nutshells are also cataloged to the **General Artifacts** module.

### 3. ABOUT THE GENERAL ARTIFACTS MANUAL

This manual is divided into three main sections. The first section provides details on the fields recorded for the DAACS Gold, Silver, and Bronze interfaces and the cataloging protocols specific to each tier. The second section explains what information is recorded in each field and describes how this attribute data is identified or measured. The third section outlines the cataloging protocols for common general artifacts. Note that each general artifact is cataloged as one of the following material categories: Ceramic, Composite, Glass, Metal, Mineral, Organic, or Stone. The cataloging protocols for this section are loosely organized by these different Category types. For example, to find the protocols for cataloging nails, one should look under the subheading for Metal Artifacts. There is also a section for Miscellaneous Artifacts that includes instructions for cataloging modern artifacts and others that do not intuitively fall under any of the aforementioned categories.

#### 3.1. COMPARISON OF ATTRIBUTES RECORDED FOR BRONZE, SILVER, AND GOLD CATALOGING LEVELS

Section	Bronze	Silver	Gold
Main	Artifact Count	Artifact Count	Artifact Count
	Category	Category	Category
	Form	Form	Form
	Brick Color	Brick Color	Brick Color
	Completeness	Completeness	Completeness
	Mended?	Mended?	Mended?
		Decoration?	Decoration?
	Coin Date	Coin Date	Coin Date



		Glass Color	Glass Color
			Window Glass Finished Edge?
			Window Glass Edge Angle
	Material	Material	Material
	Manufacturing Technique	Manufacturing Technique	Manufacturing Technique
	Notes	Notes	Notes
<b>Measurements</b>		Length	Length
		Width	Width
		Height	Height
	Weight	Weight	Weight
		Diameter	Diameter
			Brick Size
<b>Nail Information</b>			Nail Head
			Nail End
			Nail Modification
		Nail Length	Nail Length
<b>Decoration</b>		Marks	Marks
		Marks Notes	Marks Notes
		Decoration Technique	Decoration Technique
		Applied Color	Applied Color
		Decoration Notes	Decoration Notes
<b>Condition</b>		Burned?	Burned?
		Post-Manufacturing Modification?	Post-Manufacturing Modification?
		Conservation?	Conservation?

## 4. BRONZE LEVEL CATALOGING PROTOCOLS

### 4.1. BRONZE OVERVIEW

The main benefit of cataloging general artifacts at the Bronze Level is the ability to catalog expediently by recording only the most essential artifact attributes. The result is that you and your staff can catalog artifacts at a faster pace. The most notable fields that are not included in the Bronze interface are size measurements: length, width, height, and diameter. Weight is the only measurement that is recorded at the Bronze level. Additionally, the Bronze interface does not include fields that are specific to certain artifact types, such as glass color, window glass edge angle, and detailed nail information. Finally, information about decoration and condition is not recorded.

The fields recorded at the Bronze level are:

- Artifact Count
- Category
- Form
- Brick Color
- Completeness
- Mended?
- Coin Date
- Material
- Manufacturing Technique
- Weight
- Notes
- Links to Images
- Links to Objects

Using the Bronze interface for General Artifacts can substantially expedite the cataloging process. The ability to broadly batch artifacts such as nails, which can be especially time-consuming to catalog at higher levels, is useful for projects with time or resource constraints. However, think carefully about the analytical tradeoffs of cataloging at the Bronze level. You will lose certain data at the Bronze level, such as detailed measurements or decoration, that are important to your research. Additionally, we strongly recommend against using the Notes field to capture additional information. Adding unstandardized detail in an open text field will negate the time and resources you are attempting to save by using the Bronze level interface and create data that are harder to use. The choice of cataloging level should reflect the research goals, as well as time and/or budgetary considerations, specific to a given project. If

information that is not captured by the Bronze interface is important to your research, consider using the Silver or Gold interface to record additional data.

## 4.2. BRONZE BATCHING PROTOCOLS

Batch all artifacts that share the following attributes:

- Category
- Form
- Brick Color (if applicable)
- Completeness\*
- Material
- Manufacturing Technique

Note that:

- Artifact Count should record the total number of artifacts in the batch.
- Weight should record the total weight of the batch.
- Unmended and mended artifacts may be batched together if appropriate.
- Coins should be cataloged individually to record the Coin Date.

\*Note that there are specific batching protocols for nails, tacks, and straight pins at the Bronze level. Completeness for these artifacts should be recorded only as “Complete” or “Incomplete.” Do not use the “Head,” “Head and Partial Shank,” “Shank,” “Tip and Partial Shank,” or “Tip” options. This expedites the cataloging process by allowing for larger batches of these artifact types.

## 5. SILVER LEVEL CATALOGING PROTOCOLS

### 5.1. SILVER OVERVIEW

The Silver level offers a middle ground between Bronze and Gold in which more detailed attributes are recorded, but some batching is permitted to expedite cataloging. The Silver interface includes several fields that are not recorded at the Bronze level, such as size measurements, glass color, nail length, decoration, and condition information. The primary difference between the Silver and Gold levels is the level of detail recorded for specific artifact types, such as window glass, nails, and bricks. At the Silver level, window glass finished edges and edge angles, nail head type, nail end type, and nail modification are not recorded.

The fields recorded at the Silver level are:

- Artifact Count

- Category
- Form
- Brick Color
- Completeness
- Mended?
- Decoration?
- Coin Date
- Glass Color
- Material
- Manufacturing Technique
- Notes
- Length
- Width
- Height
- Weight
- Diameter
- Nail Length
- Marks
- Marks Notes
- Decoration Technique
- Applied Color
- Decoration Notes
- Burned?
- Post-Manufacturing Modification?
- Conservation?
- Links to Images
- Links to Objects

The Silver level includes most of the same information as the Gold level with a few omissions to expedite cataloging, most notably detailed nail information. For this reason, the Silver level is most appropriate when more diagnostic attribute data is desired than the Bronze level captures, but the Gold level's detail about specific artifact types is not essential to a project's research goals. However, the additional fields that are recorded at the Silver level will increase cataloging time and may require more cataloger training and expertise. The choice of cataloging level should reflect the research goals, as well as time and/or budgetary considerations, specific to a given project.

## 5.2. SILVER BATCHING PROTOCOLS

Batching rules for General Artifacts vary by category. Some artifact types are always cataloged individually to capture certain attributes. Refer to Section 8 for batching rules for particular artifact types. For artifact types that can be batched, batch all artifacts that share the following attributes:

- Category
- Form
- Brick Color (if applicable)
- Completeness\*
- Glass Color (if applicable)
- Material
- Manufacturing Technique
- Nail Length (if applicable)

Note that:

- Artifact Count should record the total number of artifacts in the batch.
- Weight should record the total weight of the batch.
- Unmended and mended artifacts may be batched together if appropriate.
- Artifacts with marks, decoration, or post-manufacturing modification should always be cataloged individually, even when the artifact type could otherwise be batched.
- Coins should be cataloged individually to record the Coin Date.

\*Note that there are specific batching protocols for nails, tacks, and straight pins at the Silver level. Completeness for these artifacts should be recorded only as “Complete” or “Incomplete.” Do not use the “Head,” “Head and Partial Shank,” “Shank,” “Tip and Partial Shank,” or “Tip” options. Complete nails should then be batched by Nail Length. This expedites the cataloging process by allowing for larger batches of these artifact types.

## 6. GOLD LEVEL CATALOGING PROTOCOLS

### 6.1. GOLD OVERVIEW

The Gold level is the most thorough and extensive cataloging level, allowing catalogers to record the maximum amount of attribute data for every artifact type. Cataloging at the Gold level allows you to capture characteristics for specific artifact types, such as window glass finished edges and edge angles, and nail head type, end type, modification, and length, that are not included in the Bronze or Silver interfaces.

Please note that the Gold level reflects the original General Artifact attribute fields that have been part of DAACS since 2001, with more fields added in the intervening years. These original fields were chosen by DAACS staff with input from material culture scholars. The Silver and Bronze Levels are “streamlined” versions of the original DAACS General Artifacts module.

The fields recorded at the Gold level are:

- Artifact Count
- Category
- Form
- Brick Color
- Completeness
- Mended?
- Decoration?
- Coin Date
- Glass Color
- Window Glass Finished Edge?
- Window Glass Edge Angle
- Material
- Manufacturing Technique
- Notes
- Length
- Width
- Height
- Weight
- Diameter
- Brick Size
- Nail Head Type
- Nail End Type
- Nail Modification
- Nail Length
- Marks
- Marks Notes
- Decoration Technique
- Applied Color
- Decoration Notes
- Burned?

- Post-Manufacturing Modification?
- Conservation?
- Links to Images
- Links to Objects

When certain attribute data are especially relevant to a project's research goals, the Gold level is the best choice for cataloging. However, consider the resource tradeoffs of recording this level of detail. Batching is more limited at the Gold level and, in some cases, recording detailed attributes requires a higher level of cataloger training and expertise. The choice of cataloging level should reflect the research goals, as well as time and/or budgetary considerations, specific to a given project.

## 6.2. GOLD BATCHING PROTOCOLS

Batching rules for General Artifacts vary by category. Some artifact types are always cataloged individually to capture certain attributes. Refer to Section 8 for batching rules for particular artifact types. For artifact types that can be batched, batch all artifacts that share the following attributes:

- Category
- Form
- Brick Color (if applicable)
- Completeness\*
- Glass Color (if applicable)
- Material
- Manufacturing Technique
- Nail Head Type, End Type, Modification, and Length (if applicable)

Note that:

- Artifact Count should record the total number of artifacts in the batch.
- Weight should record the total weight of the batch.
- Unmended and mended artifacts may be batched together if appropriate.
- Artifacts with marks, decoration, or post-manufacturing modification should always be cataloged individually, even when the artifact type could otherwise be batched.
- Window glass fragments with finished edges and/or measurable edge angles should be cataloged individually.
- Coins should be cataloged individually to record the Coin Date.

\*Note that there are specific batching protocols for nails, tacks, and straight pins at the Silver level. Completeness for these artifacts should be recorded as "Complete," "Head," "Head and Partial Shank," "Shank," "Tip and Partial Shank," or "Tip." "Incomplete" is not used for these

artifact types. Nails should then be further batched by the relevant attributes (See Section 8.2.12). These protocols allow as much detail to be captured as possible about these artifact types, but the sorting and cataloging process can be substantially longer than at the Bronze or Silver levels as a result.



## 7. GENERAL ARTIFACT FIELD DEFINITIONS AND PROTOCOLS

Below are descriptions and cataloging protocols for the fields in the General Artifacts module. Note that not all of these fields are present in the Bronze and Silver interfaces.

### 7.1. MAIN TABLE

#### 7.1.1. ARTIFACT COUNT

*Numeric Field*

Record the number of individual artifacts being cataloged. It is not necessary to record the count for certain artifact types, such as corrosion/rust and charcoal. For these artifacts, select the “This artifact cannot be counted” radio button and the Artifact Count field will be disabled. See counting rules for particular artifact types in **Section 8**, below.

#### 7.1.2. CATEGORY

*Controlled Vocabulary Field*

Record the general material class, such as “Ceramic” or “Organic,” to which the artifact belongs.

#### 7.1.3. FORM

*Controlled Vocabulary Field*

We infer a form for each artifact that essentially describes what the object is (for example, a nail, a walnut shell, or a fragment of window glass). The list includes many specific artifact forms, as well as broader categories that can be used when an artifact is not more specifically identifiable, such as “Hardware, unidentified” or “Horse Furniture.” Artifacts may also have fully unidentified forms. See Section 8 for descriptions of artifact forms.

#### 7.1.4. BRICK COLOR

*Controlled Vocabulary Field*

Use this field only when cataloging brick or brick/daub artifacts. Otherwise, leave it as the default “Not Applicable.” Use the Paste Color sheets in the DAACS Color Book to sort brick into the appropriate color categories. The most common brick colors are “Orange,” “Red,” and “Reddish Brown.”

#### 7.1.5. COMPLETENESS

*Controlled Vocabulary Field*

For most artifacts, choose “Complete,” “Incomplete,” or “Unidentifiable.” Certain artifacts such as nails, spikes, tacks, and straight pins have different cataloging protocols for the Completeness field. Refer to the sections on these artifacts for specific cataloging instructions. In addition, “Blade,” “Foot,” “Handle,” “Spout,” and “Stopper” are available for use when appropriate. Use these options if you have a fragment that corresponds to one of these completeness categories and record the larger object as the appropriate Form. For example, if you have an unidentified tool handle, record Form as “Tool, unidentified,” and Completeness as “Handle.”

### 7.1.6. MENDED?

*Controlled Vocabulary Field*

The default for this field is “No.” If the artifact fragment is physically glued to another fragment, select “Yes, Physically Mended.” If fragments are known to mend together but are not physically glued, select “Yes, Mends But Not Physically.” If it is important to know the Artifact ID of the fragment that mends, add it to the Notes field.

### 7.1.7. DECORATION?

*Controlled Vocabulary Field*

Record whether the artifact has decoration or not. Choose only “Yes” or “No” (do not use “N/A” or “Uni”). If the artifact has decoration, record the detailed information in the Decoration tab (see **Section 7.4**).

### 7.1.8. COIN DATE

*Numeric Field*

If the artifact is a coin with a legible date, enter the date in this field.

### 7.1.9. GLASS COLOR

*Controlled Vocabulary Field*

For glass artifacts such as window glass and lamp chimney, record the glass color using the Basic Colors in the DAACS Color Book.

### 7.1.10. WINDOW GLASS FINISHED EDGE?

*Controlled Vocabulary Field*

Use this field only when cataloging artifacts with form “Window Glass.” Otherwise, leave as the default “N/A.” The finished edges of a window pane may be rounded or cleanly cut, and they may sometimes have wear parallel to the edge from being set into a frame. If one or more finished edges is present, select “Yes;” otherwise, select “No.” Do not use “Uni.”

### 7.1.11. WINDOW GLASS EDGE ANGLE

*Numeric Field*

If a corner where two finished edges of a fragment of window glass meet is present, use a goniometer to measure the angle of the corner. Otherwise, leave this field blank.



Window glass fragments with measurable edge angles from Flowerdew Hundred (44PG92)

### 7.1.12. MATERIAL AND MANUFACTURING TECHNIQUE

#### *Controlled Vocabulary Fields*

Material and Manufacturing Technique are recorded in a separate, related data table that allows catalogers to record multiple types of materials and manufacturing techniques for a single artifact. If, for example, a cataloger has a bone-handled jackknife, they would be able to record “Iron” and “Forged” for the blade, and “Bone” and “Carved” for the handle.

#### **Note on “Indeterminate” and “Unidentified” Manufacturing Techniques:**

The manufacturing technique is typically recorded as “Indeterminate” for the following forms:

- Form “Charcoal” (Material = “Charcoal”)
- Form “Window Glass” (Material = “Glass”)
- Form “Cinder” (Material = “Unidentified”)
- Form “Slag” (Material = “Unidentified”)

For iron and other metal artifacts, “Indeterminate” is used when it cannot be determined if the artifact was “Wrought/Forged” or “Cast.” In addition, for some stone and organic artifacts, “Indeterminate” is used when it is unclear if the artifact has undergone human or natural modification. In other cases, use “Unidentified” when manufacturing technique is not known. See specific protocols for artifacts below (**Section 8**).

### 7.1.13. NOTES

#### *Open Text Field*

Record any additional notes about the artifact in this field. If the protocols call for specific notes to be added for that artifact type (e.g., plate glass), enter them here.

## 7.2. MEASUREMENTS TABLE

### 7.2.1. LENGTH, WIDTH, AND HEIGHT

#### *Numeric Fields*

Record length, width, and/or height dimensions in millimeters using calipers. These measurements are recorded only for certain artifact types. See Section 8 for details regarding these protocols. For most of these artifacts, length, width, and height should be measured and recorded only if they are complete measurements, with original surfaces intact. Keep in mind that any given artifact may only have one complete measurement that can be recorded; in these cases, enter information in that/those fields only. However, for artifacts with form “Unidentified,” record length, width, and height even if some or all measurements are incomplete.

Nails and several other artifact forms have separate measurement protocols. See Section 8.2.12 for details regarding these protocols.

### 7.2.2. WEIGHT

*Numeric Field*

**Weight should be recorded in grams for all artifacts.** For batched artifacts, record the weight of the entire batch. See batching rules for specific artifact types, including charcoal, modern artifacts, and window glass, in Section 8.

### 7.2.3. DIAMETER

*Numeric Field*

Record the diameter of the artifact in millimeters using calipers. This measurement applies only to straight pin and needle shanks, marbles, shot, and other spherical or cylindrical artifacts. It does not apply to nails, screws, bolts, or other hardware.

For pin and needle shanks, measure the diameter as close to the middle of the shank as possible. For spherical artifacts such as marbles and shot, record the widest diameter of the object.

### 7.2.4. BRICK SIZE\*

*Controlled Vocabulary Field*

\*This field is only used by the Monticello Archaeology Department; Brick Size is not recorded for any other DAACS sites.

Identify and sort by form (e.g., Brick Bat, Brick Fragment, Brick/Daub). Brick Size choices are 1/4, 5/8, 1-1/4, and 2-1/2 inch, measured using the USA Standard Testing Sieves. For non-batched artifacts, simply record Brick Size (often 2-1/2 inch if identifiable as Brick Bat or Brick Fragment) in the Measurements table. For batched artifacts, count and weigh (i.e., batch) by size class. Record the size as the smallest-sized sieve through which the artifact WILL NOT pass. Any fragment that falls through the 1/4 inch screen is not included in the 1/4 inch count, but its weight is included in the 1/4 inch batched record.

## 7.3. NAIL INFORMATION TABLE

### 7.3.1. NAIL HEAD

*Controlled Vocabulary Field*

For wrought and machine cut nails with completeness “Head,” “Head and Partial Shank,” or “Complete,” select the appropriate head type. See Section 8.2.12 for more information on nail head types. For wire nails, select “Not Recorded.” For all other artifacts, leave this field as the default “Not Applicable.”

### 7.3.2. NAIL END

*Controlled Vocabulary Field*

For wrought and machine cut nails with completeness “Tip,” “Tip and Partial Shank,” or “Complete,” select the appropriate end type. See Section 8.2.12 for more information on nail

end types. For wire nails, select “Not Recorded.” For all other artifacts, leave this field as the default “Not Applicable.”

### 7.3.3. NAIL MODIFICATION

*Controlled Vocabulary Field*

For complete wrought and machine cut nails, select the type of modification if applicable. If nails are not modified, select “None.” For batched incomplete wrought and cut nails, select “None” if no nails are modified and “Not Recorded” if one or more is modified. See Section 8.2.12 for more information on nail modification. For wire nails, always select “Not Recorded.” For all other artifacts, leave this field as the default “None.”

### 7.3.4. NAIL LENGTH

*Numeric Field*

For complete wrought and machine cut nails, measure the length of the nail to the nearest multiple of 5 mm. Measure a bent or otherwise modified nail by rolling it along the DAACS cataloging mat scale, or use a flexible measuring tape. Do not measure nail length for wire nails, regardless of completeness.

## 7.4. DECORATION TABLE

### 7.4.1. MARKS

*Open Text Field*

Transcribe any manufacturer’s marks observed on the artifact, even if it is incomplete or partially illegible.

### 7.4.2. MARKS NOTES

*Open Text Field*

Record any additional known information about the manufacturer’s mark, such as date or location of production.

### 7.4.3. DECORATION TECHNIQUE

*Controlled Vocabulary Field*

Decoration is recorded in a separate, related data table that allows catalogers to record multiple decorative elements for a single artifact. For example, if an item of jewelry has both stamped decoration and a paste jewel inlay, both of those elements should be recorded individually. Select the appropriate Decorative Technique from the list.

### 7.4.4. APPLIED COLOR

*Controlled Vocabulary Field*

If applied color is part of the decoration, identify the color using the **Basic Colors** section of the DAACS Color Book. Keep in mind that these represent ranges of color, not exact matches. When recording color, choose the chip that most closely matches the artifact as a whole. In addition,

the colors “Copper,” “Silver/Tin,” “Bronze,” and “Gold” may be used to identify applied color in the case of gilding or plating. Brief descriptions of the colors found in the Basic Colors section are found below:

<b>“Amber”:</b>	Medium golden-brown.
<b>“Amethyst”:</b>	Very light purple.
<b>“Blue”:</b>	A “mid-range” or “medium” shade of blue.
<b>“Brown”:</b>	This color is used to describe modern, machine made bottle glass. Do not confuse with amber glass, which is redder and lighter in color.
<b>“Colorless”:</b>	Clear.
<b>“Dark Blue”:</b>	Generally a deep, cobalt blue.
<b>“Grey”:</b>	From a light gray tint to a dark, nearly black tint.
<b>“Green/ Olive Green”:</b>	Encompasses medium green and dark green.
<b>“Light Blue”:</b>	The lightest of the three shades of blue on the Basic Color Sheet.
<b>“Light Green/Aqua”:</b>	Light greenish-blue/Seafoam or sage green.
<b>“Bright Green”:</b>	Bright green glass, similar in color to Sprite™ bottle glass.
<b>“Orange”:</b>	Brighter in color than amber.
<b>“Pink”:</b>	Pale red.
<b>“Purple”:</b>	Note that this color is darker than Amethyst.
<b>“Red”:</b>	Encompasses medium to dark reds.
<b>“Unidentifiable”:</b>	Too burned, patinated, or otherwise altered for color to be determined.
<b>“White”:</b>	Opaque white.
<b>“Yellow”:</b>	Any range of light-to-medium yellows.

If the decorative technique has no applied color, select “No Applied Color.” Do not use “Not Applicable.”

## 7.4.5. DECORATION NOTES

*Open Text Field*

Record any additional observations or descriptions of the decoration.

## 7.5. CONDITION TABLE

### 7.5.1. BURNED?

*Controlled Vocabulary Field*

The default for this field is “No.” If any part of an object is burned, enter “Yes” in this field.

### 7.5.2. POST-MANUFACTURING MODIFICATION?

*Controlled Vocabulary Field*

The default for this field is “No.” Select “Yes” when an artifact appears to have been physically modified at some point after its original production in order to change its function or appearance. Examples include a coin that has been drilled to be worn as a pendant, hand-etched window glass, or any object with repair marks.

Catalog the artifact as it would be cataloged in its original form. For example, if you have a drilled Spanish Real, catalog it with “Coin, Spanish” for the Form and “Stamped” for the Manufacturing Technique. Enter “Yes” under Post-Manufacturing Modification and describe in the Notes that the coin has been drilled. Do not record “Pendant” for Form or “Drilled” for Manufacturing Technique. However, note that objects made from naturally occurring materials such as bone or shell should be entered as their current form, with “No” selected for Post-Manufacturing Modification.

### 7.5.3. CONSERVATION?

*Open Text Field*

The default for this field is “No Conservation”. If an object has been conserved, enter “Yes” in this field and enter the conservation information into the Notes field.

## 7.6. IMAGES

Artifacts that are uncommonly found or unusual in appearance should be imaged when possible. This generally includes small finds such as toys and jewelry, decorated artifacts, or artifacts with post-manufacturing modification. Please see the Image manual for instructions on capturing and uploading artifact images.

## 7.7. OBJECTS

Please see the Object manual for information on object entry.

## 8. CATALOGING PROTOCOLS FOR COMMON GENERAL ARTIFACTS

Below are descriptions and cataloging protocols for the most commonly encountered types of artifacts in the General Artifacts module.

### 8.1. GLASS ARTIFACTS

Only certain types of glass artifacts, such as window glass, lighting glass, and paste jewels, should be cataloged in the General Artifacts module. Glass vessels, such as bottles, tablewares, and jars, should be cataloged into the Glass Vessel module, and glass beads should be cataloged in the Bead module.

#### 8.1.1 LAMP CHIMNEY

Lamp chimneys are open-ended cylinders that surround the flame on oil or kerosene lamps to control air drafts. Fragments of lamp chimney can be identified by their cylindrical curvature and relative thinness compared to most vessel glass.

Catalog as follows:

<b>Category:</b>	"Glass"
<b>Form:</b>	"Lamp Chimney"
<b>Material:</b>	"Glass"
<b>Manu Tech:</b>	Almost always "Blown." If you have mold seam lines, fluting, or other visible evidence of molding, select "Molded."

#### 8.1.2. WINDOW GLASS AND VARIOUS TYPES OF FLAT GLASS

Flat glass is batched according to Form and Glass Color.

- **"Plate Glass"**

Plate glass is a strong, cast, and polished glass containing few impurities. It was used for mirrors and large windows. The following discussion applies to plate glass used for windows. See the next section on **Mirror Glass** for how to catalog plate glass with evidence of mirroring.

DAACS uses the following three criteria to define plate glass:

1. **Thickness:** Plate glass is always at least 2.6 mm thick.
2. **Matteness:** Any sherd thicker than 2.6 mm whose surface is matte in appearance (as opposed to shiny) should be cataloged as plate glass. If the surface of a thick sherd is very shiny, the glass is probably a modern piece of plate glass. In that case, we will catalog a shiny, thick sherd as Window Glass.
3. **Color:** Once thickness and matteness have been identified, plate glass should be separated into two color categories: "Gray," and "Aqua/Light Green," as identified in the **Basic Colors** section of the DAACS Color Book.



Catalog as follows:

**Category:** "Glass"  
**Form:** "Glass, plate"  
**Material:** "Glass"  
**Manu Tech:** "Cast"

**If the plate glass is gray,** enter the following into the Notes field (Main tab):

"These gray sherds are equal to or thicker than 2.6mm. They are either mirror or window glass. However, they have no diagnostic mirror attributes, such as foil or silvering."

**If the plate glass is clear to green in color,** enter the following into the Notes field (Main tab):

"These clear-to-light green sherds are equal to or thicker than 2.6mm."

Plate glass can be batched unless the sherds have diagnostic attributes such as finished edges or etching. The only measurement that needs to be taken for any type of window or plate glass is weight.

- **"Mirror Glass"**

Mirror glass appears identical to plate glass, except that mirror glass has evidence of foil or silvering on one surface.

Catalog as follows:

**Category:** "Glass"  
**Form:** "Mirror"  
**Material:** "Glass"  
**Manu Tech:** Usually "Cast." Modern mirror glass should be "Machine Made."

Note: There is no need to include the metal silvering as a separate Material type or Decoration.

- **"Window Glass, crown"**

"Crown glass was made by blowing a sphere of glass on a blowpipe. An iron rod, called a pontil, was attached to the sphere opposite the blowpipe. The blowpipe was then broken off the sphere and the sphere was rotated on the pontil rod while it was reheated. The hole left by the blow pipe would open due to centrifugal force, would gradually assume a bell shape, and eventually flatten into a disk called a 'table of glass'. Crown glass has a smooth surface due to the fire-polishing caused by the reheating. In cross section, the surfaces will not be parallel. The center portion of the disk will always be thicker, tapering

to the edges. The center of the disk was the least salable as it contained the scar, or 'bull's eye,' left by the pontil rod. Tables of glass were relatively small in diameter and would yield a limited number of small panes" (Colonial Williamsburg Standard Operating Manual).

Catalog as follows:

**Category:** "Glass"  
**Form:** "Window Glass, crown"  
**Material:** "Glass"  
**Manu Tech:** "Blown"

- **"Window Glass, cylinder"**

"Cylinder glass was made by blowing an elongated, closed tube of glass. The ends of the tube were cut off first and the open-ended tube was then cut lengthwise. Reheating on an iron table allowed the cylinder to relax and flattened into a rectangle of glass. Cylinder glass did not have the smooth, fire-polished surface of crown glass, but it could be cut into larger pieces, thus yielding more panes of glass than was possible from the crown glass method." (Colonial Williamsburg Standard Operating Manual).

Catalog as follows:

**Category:** "Glass"  
**Form:** "Window Glass, cylinder"  
**Material:** "Glass"  
**Manu Tech:** "Blown"

- **"Window Glass, privacy"**

Privacy glass has been frosted, colored, or heavily molded to prevent people from seeing through it.

Catalog as follows:

**Category:** "Glass"  
**Form:** "Window Glass, privacy"  
**Material:** "Glass"  
**Manu Tech:** "Machine Made"

- **"Window Glass, safety"**

Safety glass has wire mesh running through its interior. Sometimes the wire mesh is absent, but the glass still retains impressions from the mesh in it.

Catalog as follows:

**Category:** "Glass"

**Form:** "Window Glass, safety"  
**Material:** "Glass"  
**Manu Tech:** "Machine Made"

Note: There is no need to include the wire mesh as a separate material.

- **"Window Glass" (General)**

Unless there is strong evidence that a sherd is crown, cylinder, privacy, safety, or plate glass, flat glass should be catalogued as general window glass.

Catalog as follows:

**Category:** "Glass"  
**Form:** "Window Glass"  
**Glass Color:** "Colorless" or "Aqua/Light Green" as appropriate.  
**Window Glass**  
**Finished Edge?** "Yes" or "No" as appropriate.  
**Window Glass**  
**Edge Angle:** As appropriate. Leave blank if there is no measurable edge angle.  
**Material:** "Glass"  
**Manu Tech:** "Indeterminate"

**Batching:** All window glass can be batched by type and color, unless the sherds have distinctive characteristics. Sherds of the same color with finished edges can be batched together with Window Glass Finished Edge recorded as "Yes." Sherds of the same color with a measurable window glass angle may be batched together only if the window glass angle is the same. If you have hand-incising or writing, catalog each sherd separately, select "Yes" for Post-Manufacturing Modification, and describe the modification in the notes. For both batched and single sherds, the only measurements that need to be taken are count and weight.

Note: Plate glass should not be cataloged as window glass. It is distinguished from window glass because it is greater than 2.6mm thick and has a matte finish. See the above section on "Plate Glass" for a more detailed discussion of this artifact class.

## 8.2 METAL ARTIFACTS

### 8.2.1. ALUMINUM FOIL

Aluminum foil should be cataloged as follows:

**Category:** "Metal"  
**Form:** "Foil"  
**Completeness:** "Incomplete"

**Material:** "Aluminum"  
**Manu Tech:** "Machine Made"

Aluminum foil can be batched. The only measurements that need to be taken are count and weight.

### 8.2.2. BRIDLE BITS

A bit is a type of horse furniture that is placed in the mouth of a horse to assist the rider in communicating with the animal. See Noel Hume 1969:239-241 and Figure 75; <http://www.jefpat.org/diagnostic/SmallFinds/BridleBosses/BitGuide.pdf>, and Berkebile 1978:414-417 for illustrations and additional discussion. The following descriptions of specific bit forms are based on information from these sources.

- **"Bit, curb"**

A curb bit consists of elongated cheek pieces (either straight or curved) extending above and below the mouthpiece. The cheekpieces are linked together with a lip strap, a chain below the chin, and sometimes a bar to hold the cheekpieces apart. The curb bit is a leverage bit, meaning that it multiplies the pressure applied by the rider. The curb can amplify rein pressure several times over, depending on the length of the curb bit's shank. Curb bits can have solid (a single bar), jointed (two pieces that join together), or V-shaped mouthpieces (see Noel Hume 1969:Figure 75). It also has rings or loops upon the lower arms/shank for receiving the driving reins. In the sixteenth through eighteenth centuries curb bits often had cast metal bridle bosses that were anchored to the cheekpiece to conceal its junction with the mouthpiece.



**Curb bit with solid mouthpiece**

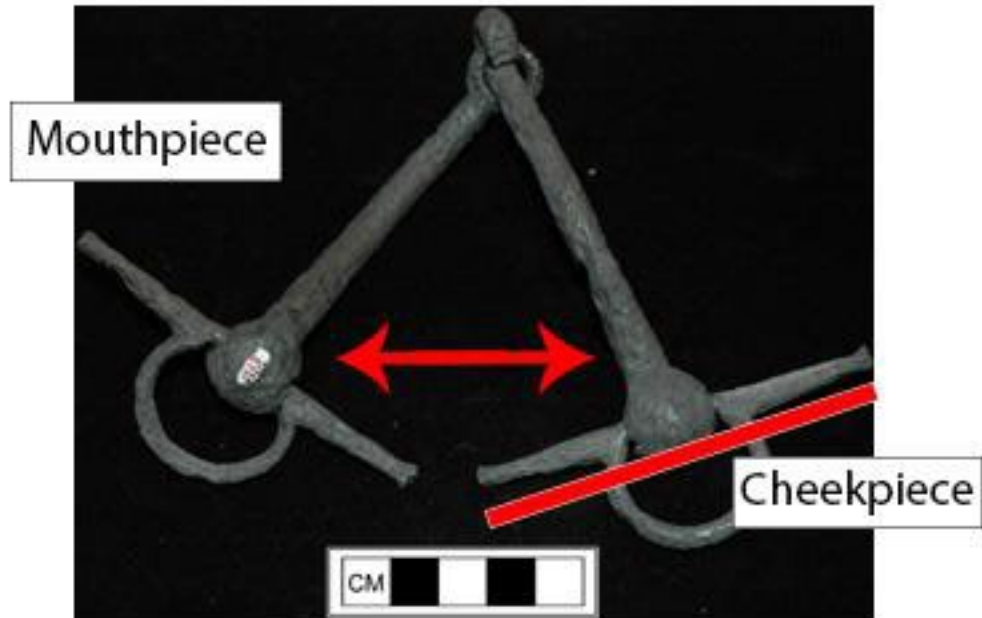
Catalog as follows:

<b>Category:</b>	"Metal"
<b>Form:</b>	"Bit, curb"
<b>Material:</b>	Usually "Iron"
<b>Manu Tech:</b>	Usually "Wrought/Forged" but can be "Cast"

Record any complete measurements on measurements tab.

- **"Bit, snaffle"**

A snaffle bit consists of a pair of rod-like cheekpieces having a central loop or ring for a single rein, to which was attached a jointed bit. The cheekpieces did not have a shank (unlike a curb bit). Note: Not all bits with jointed mouthpieces are snaffle bits. Snaffle bits can have jointed, stiff, twisted or double mouth pieces. Curb bits can also have jointed mouthpieces. If you only have the mouthpiece fragment of a bit, use the more general term "Bit, harness, unid."



### Snaffle bit with jointed mouthpiece

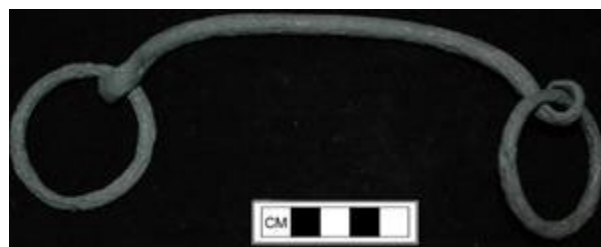
Catalog as follows:

<b>Category:</b>	"Metal"
<b>Form:</b>	"Bit, snaffle"
<b>Material:</b>	Usually "Iron"
<b>Manu Tech:</b>	Usually "Wrought/Forged" but can be "Cast"

Record any complete measurements on measurements tab.

- **"Bit, bridoon"**

A small bit, having loose rings, and either a solid or jointed mouth and no cheekpieces. Often used as a second bit in conjunction with a curb bit. Also called bradoon.



**Bridoon Bit**

Catalog as follows:

**Category:** "Metal"  
**Form:** "Bit, Bridoon"  
**Material:** Usually "Iron"  
**Manu Tech:** Usually "Wrought/Forged" but can be "Cast"

Record any complete measurements on measurements tab.

- **"Bit, harness unid."**

Note that you can only record a bit fragment as one of the more specific types outlined above when both the cheekpiece/shank and mouthpiece are present. Otherwise, use the more general term "Bit, harness". If there are attributes that suggest it is one of these more specific types, include that information in the notes.

Catalog as follows:

**Category:** "Metal"  
**Form:** "Bit, harness unid."  
**Material:** Usually "Iron"  
**Manu Tech:** Usually "Wrought/Forged" but can be "Cast"

Record any complete measurements on measurements tab.

### 8.2.3. COINS

Catalog all coins individually as follows:

**Category:** "Metal"  
**Forms:** "Coin, American"  
 "Coin, Danish"  
 "Coin, Dutch"  
 "Coin, English"  
 "Coin, Irish"  
 "Coin, Jamaican"  
 "Coin, Spanish"  
 "Coin, unid"  
 "Coin, Virginia"  
**Completeness:** As appropriate  
**Coin Date:** As appropriate  
**Material:** As appropriate  
**Manu Tech:** "Stamped"  
**Measurements:** Record height, weight, and diameter

Describe the coin as thoroughly as possible in the Notes field. Include the denomination, any designs seen on the coin, etc. Image both sides of the coin if possible.

#### 8.2.4. CORROSION/RUST

Often, one will be faced with cataloging unidentifiable lumps or piles of rust with no discernible parts left intact. Form should be “Corrosion/Rust,” with the manufacturing technique as “Indeterminate.” Material should be cataloged as appropriate, e.g. “iron” or “pewter” as appropriate. The only measurement that needs to be taken is weight.

**Batching:** Due to the high fragmentation of metal artifacts, “Corrosion/Rust” should not be counted. Select the “This artifact cannot be counted” radio button on the main tab.

A common form of corrosion is the spalling of large sheets of rust from the surface of flat objects. This corrosion will be characterized by being relatively thin and flat, with one side appearing newly broken off and the other rusted over. If one sees corrosion breaking off of an artifact while in the process of being cataloged, batch the corrosion and the original artifact together and note what has happened.

#### 8.2.5. ESCUTCHEONS AND KEYHOLE COVERS

Escutcheons are decorative metal accents, usually copper alloy, that surround keyholes on furniture and doors. They can be very elaborate or a simple brass frame placed around a keyhole. They can lay flat or extend above the surface. A keyhole cover is a solid metal decorative element (usually copper alloy) that swings to cover the open space of the keyhole. Some archaeologists and historians include the keyhole cover when discussing escutcheons. In DAACS, these two elements should be cataloged separately UNLESS the keyhole cover is still attached to the escutcheon. In this case, catalog the artifact with form “Escutcheon” and record in the Notes field that the keyhole cover is attached. Image these artifacts when possible.

#### 8.2.6. GROMMETS

Grommets are metal or plastic rings used to reinforce eyelets, common on both clothing and shoes. They can be identified by their characteristic flattened ring shape. Most are small clothing or shoe grommets, although larger grommets are seen on tarps, tents, etc. There is sometimes an indented ridge evident along the outside of the ring where the grommet was attached to the cloth or leather.

The majority of grommets found on historical sites are copper alloy, although iron, aluminum, and plastic grommets have all been recovered.

For Manufacturing Technique, most Copper Alloy grommets will be “Stamped.” However, if the grommet appears to be modern, list the Manufacturing Technique as “Machine Made.” Plastic grommets are, of course, always “Machine Made.”

**Batching:** Grommets can be batched by diameter. The only measurements that need to be taken are count, weight, and diameter.



### 8.2.7. GUNS AND GUNPARTS

**The following protocols were established in August 2021.** Gun parts recovered on seventeenth century sites reflect a period in which gun technology was rapidly evolving in Europe and migrating to North America with European colonists. Many of the major changes were related to small technological innovations that resulted in the modification, addition, or subtraction of particular small metal parts manufactured for rifle lock mechanisms. These changes improved the efficiency and ease with which these weapons were fired. Despite the technological evolution, some of the principal components of muskets and rifles carried over into new designs with little or no modifications. Consequently, there is considerable diversity in the lock mechanisms until the early 18th century, when the flintlock became the predominant firearm technology in British North America.

Prior to the early 18th century, when the flintlock became the predominant firearm technology in British North America, there were several different types of gun lock mechanisms. Each unique lock mechanism had numerous moving parts. Some of those parts were unique to specific lock types (e.g., a wheel is unique to a wheel lock mechanism) while other gun lock parts were common across lock types (e.g., mainsprings are found on wheel locks, dog locks, and flint locks; cocks are found on dog locks and flint locks). Although there are a number of different lock technologies, identifying and dating an individual lock part to a specific gunlock type is very difficult without having the larger gunlock mechanism. Additionally, some lock mechanisms (e.g., dog locks) are associated with multiple gun types. Consequently, without the entirety of the lock mechanism it is nearly impossible to identify the type of firearm (i.e. musket, caliver, arquebus) from individual lock mechanism parts or even complete lock mechanisms.

However, there are distinct morphological differences in a handful of lock mechanism parts (i.e. flash pans, batteries, sear springs) that we can use to distinguish between different lock mechanism technologies. Due to the variation of lock mechanism technologies through time, being able to identify the presence of certain lock mechanisms in an assemblage can still provide insights into the types of weapons used and discarded by a site's inhabitants.

As a result, DAACS uses lock mechanism type as the primary identifier in the authority term options for gun form, followed by the lock part (e.g., "Gun, flintlock, hammer/cock"). When a lock part could be from multiple types of locks (i.e., the mainspring, which does not seem to change much through time) we identify the lock mechanism type as "unidentifiable" and describe the possible lock mechanism in the Notes field. If you are able to describe anything about the type of firearm that the artifact came from (e.g., musket, pistol), record these diagnostic attributes in the Notes field. Any further details about the part that are not captured in the database fields should also be described in the Notes.

Catalog gun parts as follows:

<b>Count:</b>	1 (Do not batch gun parts)
<b>Category:</b>	"Metal," in most cases.

**Form:** If the part is from a lock mechanism:

1. Identify the artifact type: "Gun"
2. Identify the lock mechanism: For example, "Doglock"
3. Identify the part of the lock mechanism: For example, "Sear spring"
4. The resulting form authority term in this example would be "Gun, doglock, sear spring"

Lock mechanism terms currently in the database include:

"Gun, doglock, buffer"  
"Gun, doglock, sear spring"  
"Gun, flintlock, hammer/cock"  
"Gun, LM, unid., frizzen"  
"Gun, LM, unid., frizzen spring"  
"Gun, LM, unid., hammer/cock"  
"Gun, LM unid., mainspring"  
"Gun, snaphaunce, flash pan"  
"Gun, snaphaunce, hammer/cock"  
"Gun, snaphaunce, lock plate"  
"Gun, wheellock, safety catch"

If the part is not from a lock mechanism:

1. Identify the artifact type: "Gun"
2. Identify the specific part: For example, "Barrel"
3. The resulting form authority term in this example would be "Gun, barrel"

Non-lock mechanism gun terms currently in the database include:

"Gun, barrel"  
"Gun, barrel cleaning attachment"  
"Gun, barrel wrench"  
"Gun, breech plug"  
"Gun, lock plate"  
"Gun Part, unidentified"  
"Gun, plate"  
"Gun, trigger"  
"Gun, trigger guard"

**Material:** Usually "Iron." Most of the working parts of a firearm are iron or iron alloys. Although there is a strong possibility that certain parts of the lock mechanism are manufactured of steel, or case hardened with steel

surfaces and iron cores, it is impossible to tell without specialized equipment. The default material should be "Iron." Decorative elements are often manufactured out of other metals and metal alloys, such as silver and copper alloy.

**Manu Tech:** "Wrought/Forged" or "Cast." Most of the iron (or steel) lock mechanism parts would have been wrought/forged into shape and filed into their final form. The default for iron elements should be "Wrought/Forged." For other metals such as silver and copper alloy the default should be "cast."

**Measurements:** Take height, length, and width measurements of the artifact if cataloging into the Silver or Gold interfaces. Weigh each artifact (even if incomplete). Record exterior diameter measurement for gun barrels, and the interior bore diameter of the barrel opening in the notes.

**For more information on common gun lock mechanisms in the 17th and 18th centuries, see:** John P. McCarthy, Jeffrey B. Snyder, Billy R. Roulette, Jr., "Arms from Addison Plantation and the Maryland Militia on the Potomac Frontier," *Historical Archaeology*, 1991, 25: 66-79; Harold L. Peterson, *Arms and Armor in Colonial America 1526-1783*. Harrisburg: Stackpole Company, 1956 (A more recent edition published in 2000 by Dover Publications, Inc.); T.M. Hamilton, *Colonial Frontier Guns*. Tennessee: Pioneer Press, 1987.; Bruce Larson, *An Interpretation of Firearms in the Archaeological Record in Virginia 1607-1625*. College of William and Mary Dissertations, Theses, and Masters Projects, 2003. <https://dx.doi.org/doi:10.21220/s2-y2em-kn42>

### **Common Lock Mechanisms Encountered on 17th and 18th Century North American Sites:**

Although a variety of terms (arquebuses, cavaliers, and muskets) were used interchangeably in the 16th century to describe a range of firearms, by the 17th century "caliver" began to designate a weapon lighter than a musket with a wheel lock as opposed to a matchlock (Peterson 1956: 13). Musket has always referred to a heavy military firearm requiring a rest in order to be fired, though by the middle of the 17th century the average weight had decreased substantially (Peterson 1956: 14). Matchlock weapons, and lock mechanisms in general, exhibited a gradual, though uneven, technological evolution throughout the 17th century, developing into the flintlock weapons that were common in the 18th century (Peterson 1956; McCarthy et. al. 1991). Peterson (1956: 18) emphasizes that multiple components of any individual weapon need to be considered when assigned a date, as firearms with different technological mechanisms share individual parts and characteristics.

### **Snaphaunce (16th - 17th century):**

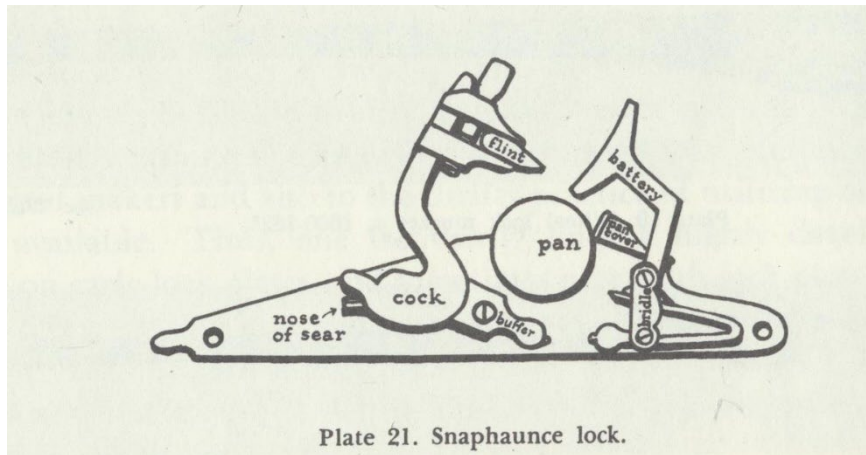


Image: (Peterson 1956: 20)

Although a variety of terms are used now to distinguish between the different evolutionary stages of the flintlock, the term “snaphaunce” (a Dutch term meaning “snapping cock”) was widely used to describe any weapon where the needed spark was produced via a piece of flint held in a cock (Peterson 1956: 26). The snaphaunce as described today is the earliest form of a flintlock, developed in Scandinavia in the mid-16th century. It was quickly superseded by the English lock and its popular variant, the dog lock.

### Matchlock (17th Century):

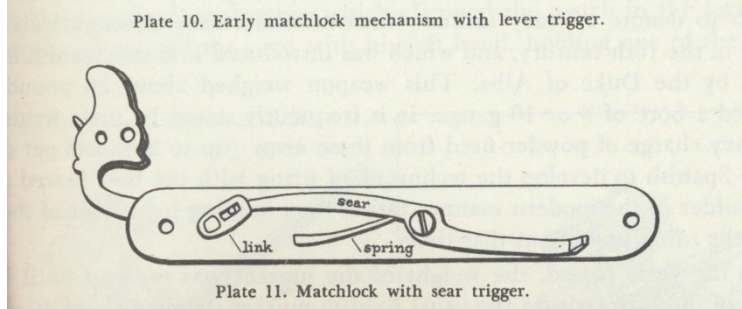
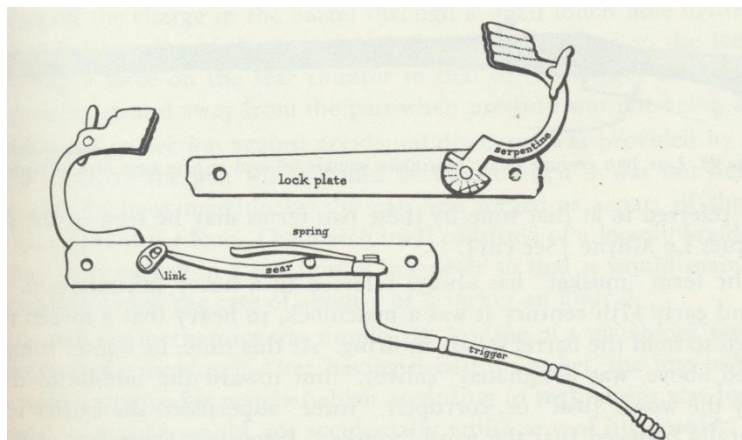


Image: (Peterson 1956: 13)

Most popular prior to the mid-1620s, matchlock rifles had considerable drawbacks that resulted in their decline in popularity by the third quarter of the 17th century, when lighter and more efficient flintlock rifles were introduced. Matchlock rifles were slow and “clumsy,” requiring the maintenance of a lit match that was both logistically difficult (e.g., if it rained, if the user was caught by surprise) and a dangerous liability for the user, frequently causing accidental injury (Peterson 1956:19). However, given that they were much cheaper and less technologically complex, matchlock rifles remained common even when superior technology was available.

### Early Dog Lock (17th Century):

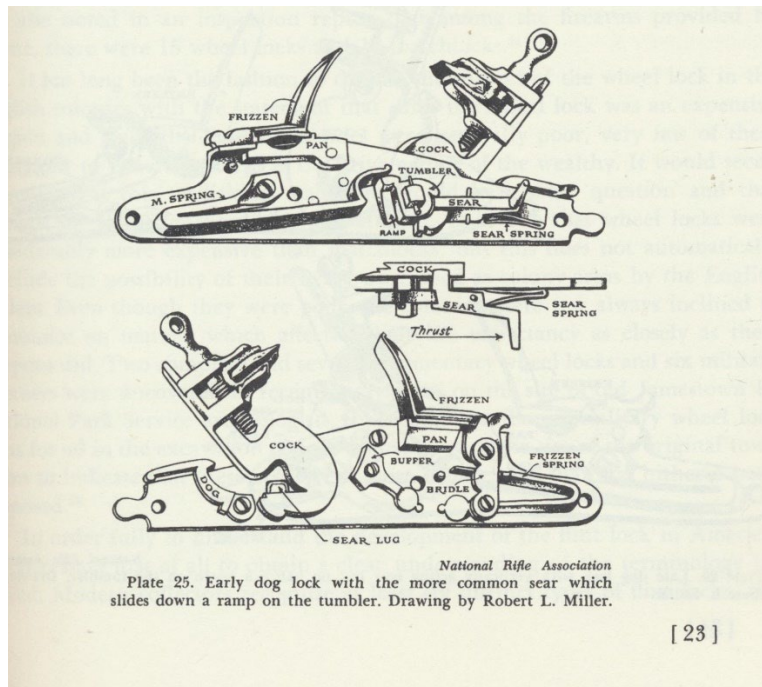


Image: (Peterson 1956: 22)

### Late Dog Lock (Late 17th Century and Early 18th Century):

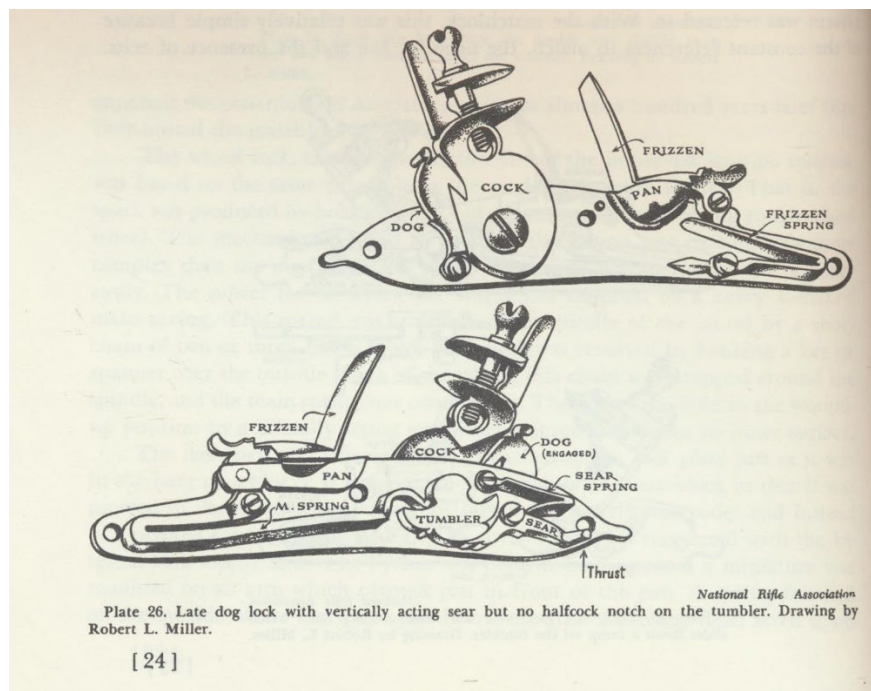


Image: (Peterson 1956: 23)

The English/Dog lock mechanism was first developed in the first decades of the 17th century and experienced a long evolution with minor alterations to individual parts over the next century (Peterson 1956: 29). One primary modification serves as a temporal marker: the shift from the lateral moving to vertical moving sears around the mid-seventeenth century, visible in the difference between the early and late diagrams above (Peterson 1956: 31). From archaeological data, it appears the dog lock is the most common mechanism in use in North America for the bulk of the 17th century (Peterson 1956: 31).

**Flint Lock (18th Century):**



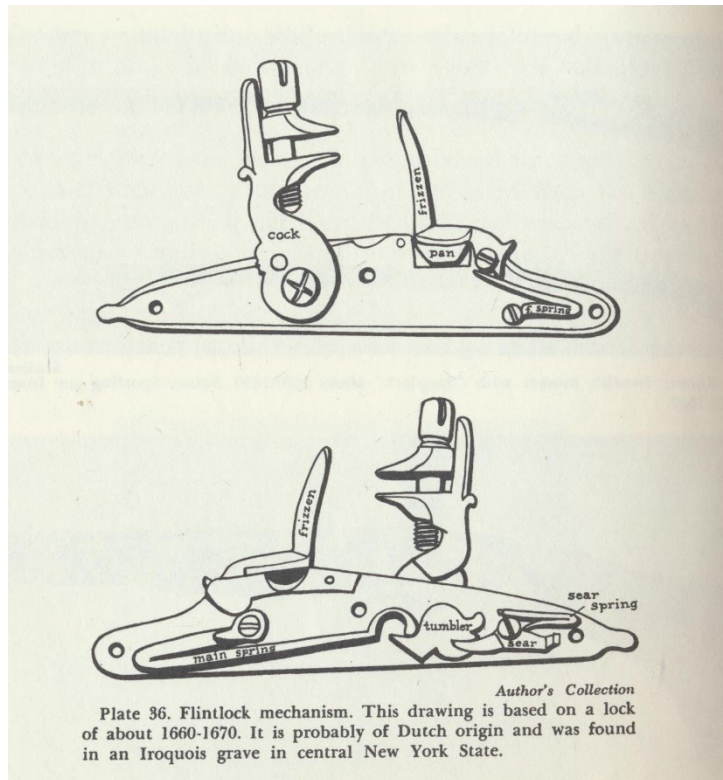


Image: (Peterson 1956: 32)

The first “true” flintlocks were developed in early 17<sup>th</sup> century France, and by the third quarter of the century had fully replaced the dog lock as the primary weapon mechanism in England (Peterson 1956: 35). Flintlock rifles likely reached America in recognizable quantities by 1660 (Peterson 1956: 35). Like the doglock, there are subtle changes that distinguish a 17th-century mechanism from an 18th-century mechanism, including the addition of a bridle on the tumbler and as support for the pivot of the battery (or “frizzen”). The flintlock had fully supplanted the doglock in the British army by 1718.

**Wheel Lock (Predominantly 17th Century):**

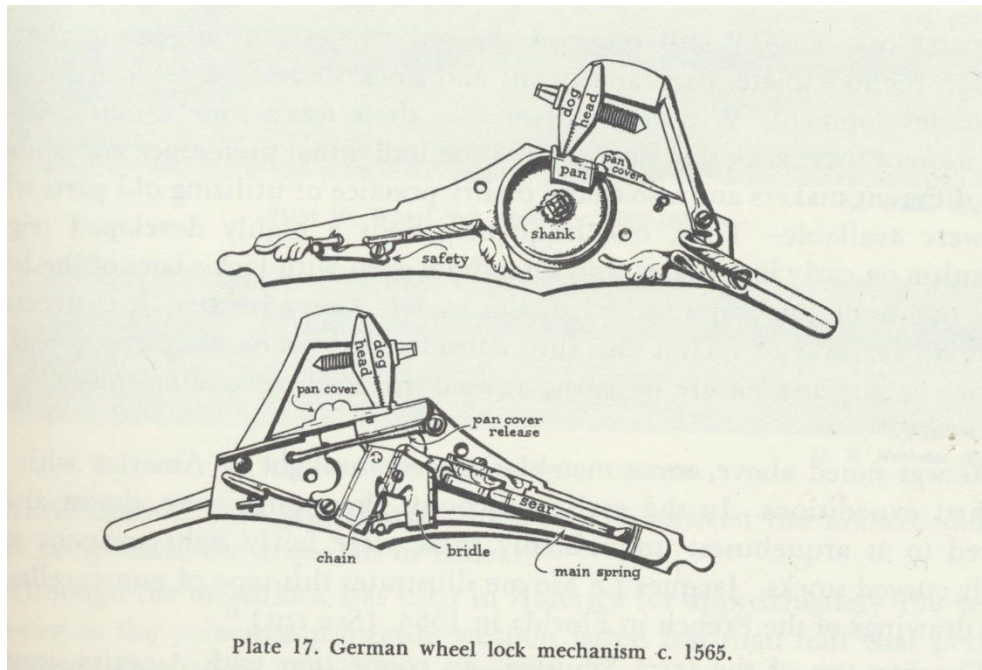


Image: (Peterson 1956: 17)

A much faster mechanism than the matchlock developed in Germany as early as 1520 and temporally was the first improvement upon the earlier technology. In a wheel lock mechanism, “the spark was produced by holding a piece of pyrite against a revolving rough-edged wheel” (Peterson 1956: 22). It is more difficult to discern the presence of wheel locks in the documentary record, unlike matchlocks which are usually distinguishable by the need for a lit match or a rest, and they are often referred to as “firelocks” which is a term also used to describe early flintlocks (Peterson 1956: 24). Although some scholars previously argued they were too expensive to be commonly found in the colonies, they have been located archaeologically.

### 8.2.8. **HARDWARE**

Hardware is a broad category that encompasses items, generally made of metal, that serve to join or reinforce multi-component items such as furniture or machinery (e.g., screws, hinges, handles, brackets, etc.). Hardware is part of a finished product and does not refer to tools and equipment.

“Hardware, unidentified” is a broad form category for objects that seem to be hardware but cannot be identified to an exact form. More specific categories of hardware are listed below.

- **“Furniture Hardware”:** A general term for metal components of furniture that is used when the exact type of hardware, or the exact type of furniture it belonged to, cannot be



identified. Furniture hardware is often decorative in appearance if it will be seen on the finished piece of furniture.

- **“Hardware, electrical”**: Any hardware that can be identified as a component of an electrical device or electrical infrastructure.
- **“Hardware, vehicle”**: A piece of equipment that can be identified as originating from a non-motorized vehicle used to transport goods and/or people. This term encompasses carriage, cart, and wagon hardware, but not hardware related to fuel-powered vehicles such as automobiles or tractors (for these, use **“Auto Part”**).
- **“Screw”**: A fastener with a threaded shank. There are several types of screws listed in DAACS identified by their head shape. For Completeness, choose from “Head,” “Head and Partial Shank,” “Shank,” “Tip and Partial Shank,” “Tip,” or “Complete.” Screws of the same type and completeness may be batched together. The only measurements you need to record are Count and Weight.
- **“Horse Furniture”**: Hardware associated with horses that cannot be classified as buckles, horseshoes, or any other specifically defined category. For example, the strap retainer pictured below is listed as Horse Furniture:



*Note:* The term Horse Furniture does not include carriage parts. For these, identify the specific part or use “Hardware, vehicle.”

### 8.2.9. HORSESHOES

The earliest horseshoes are “Wrought/Forged.” Machine-made horseshoes became popular in the mid-1800s. If nails remain in the horseshoe, record any information about them (e.g., number, size, head type) in the Notes field. Do not catalog these nails separately.

### 8.2.10. LEAD SHOT

**The following protocols for cataloging lead shot and associated production materials were established in April 2021.** Starting around 1782, shot was made by dropping molten lead from the top of a shot tower. Prior to that, lead shot was cast in single or gang molds. Lead shot that is 6 mm or less in diameter is likely dropped. It should be cataloged as “Shot, Bird” and can be

batched by 1 mm size classes. Lead shot that is greater than 6 mm in diameter should always be cataloged individually as “Shot, round.”

- **“Shot, Bird”:**

<b>Category:</b>	“Metal”
<b>Form:</b>	“Shot, bird”
<b>Completeness:</b>	As appropriate, usually “Complete”
<b>Material:</b>	“Lead”
<b>Manu Tech:</b>	“Dropped” unless there is obvious evidence of casting (e.g., mold seams, partial mold nib)
<b>Diameter:</b>	Use 1 mm size classes and record the maximum diameter. For example, batch all shot that is between 1 and 2 mm together and record “2” for diameter. Do this even when the count is 1.
<b>Weight:</b>	Record weight of batch.
<b>PMM?:</b>	If the shot is misshapen or has a flattened side (i.e., possible signs of impact or firing), or incised marks or pitting that may be associated with chewing, select “Yes” for Post-Manufacturing Modification and describe the modification in the notes.

- **“Shot, Round”:**

<b>Category:</b>	“Metal”
<b>Form:</b>	“Shot, round”
<b>Completeness:</b>	As appropriate, usually “Complete”
<b>Material:</b>	“Lead”
<b>Manu Tech:</b>	“Cast”
<b>Diameter:</b>	Individually measure diameter of each shot using calipers.
<b>Weight:</b>	Record weight of each shot.
<b>PMM?:</b>	If the shot is misshapen or has a flattened side (i.e., possible signs of impact or firing), or incised marks or pitting that may be associated with chewing, select “Yes” for Post-Manufacturing Modification and describe the modification in the notes.
<b>Notes:</b>	Note if shot has a significant amount of mold nib attached.

- **“Sprue, gang mold with attached shot”:**

Occasionally one recovers lead shot that was cast in a gang mold and never detached from the sprue (the pouring channel portion of the mold cavity). Record these objects as “Sprue, gang mold with attached shot.” Use this term even if the sprue has both shot and empty nibs.



Catalog as follows:

- Category:** "Metal"
- Form:** "Sprue, gang mold with attached shot"
- Completeness:** As appropriate, usually "Incomplete"
- Material:** "Lead"
- Manu Tech:** "Cast"
- Measurements:** Record length of sprue, even if incomplete. Record diameter of the lead shot. If multiple pieces of shot are present, record their average diameter. Record weight.
- Notes:** Record the number of shot attached to the sprue, as well as any empty nibs, if present.

- **"Sprue, gang mold":**

Use this term if you have only the sprue from lead shot production with no attached lead shot.



Catalog as follows:

- Category:** "Metal"

**Form:** "Sprue, gang mold"  
**Completeness:** As appropriate, usually "Incomplete"  
**Material:** "Lead"  
**Manu Tech:** "Cast"  
**Measurements:** Record length of sprue, even if incomplete, and weight.  
**Notes:** Record the number of empty nibs on the sprue.

### 8.2.11. BULLETS AND BULLET CASINGS

If only the projectile (live portion):

**Category:** "Metal"  
**Form:** "Bullet"  
**Completeness:** "Incomplete"  
**Material:** "Lead" or "Lead Alloy"  
**Manu Tech:** "Machine Made"

Modern bullets should only be weighed. The type of bullet (0.38, 0.22, etc.) should be recorded in the Notes. Non-discharged bullets should be cataloged and then disposed of properly. One method is to soak it in oil for at least twenty-four hours.

Catalog an empty bullet casing as follows:

**Category:** "Metal"  
**Form:** "Bullet casing"  
**Completeness:** "Complete"  
**Material:** "Copper Alloy"  
**Manu Tech:** "Machine Made"

### 8.2.12. NAILS/SPIKES

A Nail with length of 120 mm or greater is cataloged as a Spike. Nails and spikes are cataloged in the same way, with the form recorded as "Nail" or "Spike," accordingly. Nails and spikes are batched and cataloged differently at the Bronze, Silver, and Gold tiers. The sorting and batching protocols for nails at each cataloging tier are outlined below.

#### Bronze Interface Protocols:

1. Sort nails by manufacturing technique: "Wrought/Forged," "Machine Cut," "Not a Wire Nail," "Drawn/Wire," or "Unidentifiable."
2. All wire nails can be batched together, regardless of completeness. Select "Not Recorded" for Completeness. Record weight.
3. For all other nails, sort by completeness: "Complete" or "Incomplete." Do not use the "Head," "Head and Partial Shank," "Shank," "Tip and Partial Shank," or "Tip" options.
4. Record weight for each batch.

#### Silver Interface Protocols:

1. Sort nails by manufacturing technique: "Wrought/Forged," "Machine Cut," "Not a Wire Nail," "Drawn/Wire," or "Unidentifiable."
2. All wire nails can be batched together, regardless of completeness and length. Select "Not Recorded" for Completeness. The only measurement you need to record is Weight. Leave the Nail Length field blank.
3. For all other nails, sort by completeness: "Complete" or "Incomplete." Do not use the "Head," "Head and Partial Shank," "Shank," "Tip and Partial Shank," or "Tip" options.
4. Catalog each batch of incomplete nails. The only measurement you need to record is Weight. Leave the Nail Length field blank.
5. Sort the complete nails into 5 mm size classes. Measure the length of each nail and round to the nearest 5 mm. Measure bent or otherwise modified nails by rolling them along the cataloging mat scale or using a flexible tape measure.
6. Record weight and nail length of each batch. Use the Nail Length field to record the length. *Do not use the Length field on the Measurements tab.*

#### **Gold Interface Protocols:**

1. Sort nails by manufacturing technique: "Wrought/Forged," "Machine Cut," "Not a Wire Nail," "Drawn/Wire," or "Unidentifiable."
2. All wire nails can be batched together, regardless of completeness, length, and nail attributes. Catalog as follows:

<b>Category:</b>	"Metal"
<b>Form:</b>	"Nail"
<b>Completeness:</b>	"Not Recorded"
<b>Material:</b>	"Iron"
<b>Manu Tech:</b>	"Drawn/Wire"
<b>Measurements:</b>	Only record weight.
<b>Nail Head:</b>	"Not Recorded"
<b>Nail End:</b>	"Not Recorded"
<b>Nail Modification:</b>	"Not Recorded"
<b>Nail Length:</b>	Leave blank.

3. For all other nails, sort by completeness: "Complete," "Head," "Head and Partial Shank," "Shank," "Tip and Partial Shank," or "Tip." Do not use "Incomplete."
4. For incomplete nails, sort by Nail Head type or Nail End type, as appropriate. Note that we do not sort by nail modification for incomplete nails. Catalog each batch as follows:

<b>Category:</b>	"Metal"
<b>Form:</b>	"Nail"
<b>Completeness:</b>	As appropriate
<b>Material:</b>	"Iron"
<b>Manu Tech:</b>	As appropriate
<b>Measurements:</b>	Only record weight.

**Nail Head:** Select the appropriate head type for nails with Completeness "Head" or "Head and Partial Shank." Otherwise, select "Not Applicable."

**Nail End:** Select the appropriate head type for nails with Completeness "Tip" or "Tip and Partial Shank." Otherwise, select "Not Applicable."

**Nail Modification:** If none of the nails are modified, select "None." If one or more is modified, select "Not Recorded."

**Nail Length:** Leave blank.

5. For complete nails, sort by Nail Head type, Nail End type, and Nail Modification.
6. Further sort each batch of complete nails into 5 mm size classes. Measure the length of each nail and round to the nearest 5 mm. Measure bent or otherwise modified nails by rolling them along the cataloging mat scale or using a flexible tape measure. Catalog each batch as follows:

**Category:** "Metal"  
**Form:** "Nail"  
**Completeness:** "Complete"  
**Material:** "Iron"  
**Manu Tech:** As appropriate  
**Measurements:** Only record weight.  
**Nail Head:** As appropriate.  
**Nail End:** As appropriate.  
**Nail Modification:** As appropriate.  
**Nail Length:** As appropriate.

The following is an example of how one might catalog the same batch of three identical complete, wrought nails at each cataloging tier:

**Bronze Interface:**

**Artifact Count:** 3  
**Category:** "Metal"  
**Form:** "Nail"  
**Completeness:** "Complete"  
**Material:** "Iron"  
**Manu Tech:** "Wrought/Forged"  
**Measurements:** Record weight.

**Silver Interface:**

**Artifact Count:** 3

**Category:** "Metal"  
**Form:** "Nail"  
**Completeness:** "Complete"  
**Material:** "Iron"  
**Manu Tech:** "Wrought/Forged"  
**Measurements:** Record weight.  
**Nail Length:** 45

**Gold Interface:**

**Artifact Count:** 3  
**Category:** "Metal"  
**Form:** "Nail"  
**Completeness:** "Complete"  
**Material:** "Iron"  
**Manu Tech:** "Wrought/Forged"  
**Measurements:** Record weight.  
**Nail Head:** "Rosehead"  
**Nail End:** "Chisel/Shovel"  
**Nail Modification:** "None"  
**Nail Length:** 45

**Notes on Head Type:**

For wrought nails, a nail head should be identified as "Rosehead" only if one sees the apex and at least three hammer strikes. Otherwise, the head should be identified as "Wrought, unid." Other more specific head types (e.g., double strike, peaked) may be identifiable, but these are subsumed under the general category of "Wrought, unid."

Horseshoe nails have distinctive, triangle-shaped heads. Catalog these as regular nails, but select "Triangle/Horse" for Nail Head type.

**Notes on Tip Type:**

**"Blunt"**

The standard nail tip seen on machine cut nails; tip is squared off.



### **“Chisel/Shovel”**

Tip is “flared out” from being flattened by a hammer strike. Also known as a “spatulate tip.” Seen only on wrought nails.



### **“Point”**

All sides of nail come to a point. Generally seen on wrought and wire nails.



### **“Rounded”**

Tip is smoothly rounded. Seen only on wrought nails.





## Notes on Nail Modification:

### “Clinched”



Tip is U-shaped or L-shaped



Tip is J-shaped



Tip is a Curlicue

### “Pulled”



Overall nail is J-shaped



Overall nail is C-shaped

### “Bent”



Any other modification to the shank (not straight)

**“None”**



No modification to the shank.

### **Reproduction Nails and Spikes:**

Reproduction nails should be batched and cataloged using the same protocols as original nails, with form “Nail, reproduction.” The appropriate manufacturing technique should be recorded for the reproduction nail (i.e., machine cut or wrought).

### **8.2.13. CORRODED METAL, LIKELY NAIL**

The form “Corroded metal, likely nail” was added to the database in May 2021. This term should be used when a metal artifact is generally nail-shaped, but the surface is completely covered by corrosion and no diagnostic attributes are present that allow the cataloger to discern if the object was a nail. Use “Corroded metal, likely nail” even if a squared core is present, as other types of iron hardware can be square in cross-section.

### **8.2.14. NAIL WASTER**

“Nail, waster” refers to wrought nails that were flawed and discarded during the manufacturing process. Nails can be flawed at either the hardy or anvil stage of production (Kelso et al 1984:41). Nail wasters should be cataloged as regular nails except for two fields: Form and Nail Head Type.

**Form:** Select “Nail, waster” for both anvil and hardy wasters.

**Nail Head Type:** Select “Flaw, hardy” or “Flaw, anvil” as appropriate.

Hardy wasters have a head type of “Flaw, hardy.” They are identified as nails that were worked into shanks, but a mistake occurred during or just after they were broken from the nail rod. They are characterized by completely unfinished heads that are often pointy.



Examples of hardy wasters. Note the diagnostic “pointy spurs” left on the shanks after the nail was incorrectly snapped from the nail rod.

Anvil wasters have a head type of “Flaw, anvil.” They are identified as nails that were put into the anvil and partially hammered, but a mistake occurred before they were completed. They often have a pronounced bend or zigzag shape at the head of the nail.



Examples of Anvil Wasters. Note the pronounced bends or zigzags near the heads of the nails.

### 8.2.15. NAIL ROD

“Nail Rod” refers to the long, rectangular rods of iron from which wrought nails were forged. Nail rod can be batched. Binders, the twisted pieces of nail rod used to hold bundles of nail rod together, should be cataloged individually, with Form “Nail Rod Binder.”

### 8.2.16. SHEETING

Very thin, flat pieces of iron of indeterminate purpose should be cataloged as “Sheeting,” usually with “Rolled/Sheet” as the manufacturing technique. Iron sheeting is sometimes “Wrought/Forged” – this sheeting is usually thicker and more irregular. Occasionally, materials other than iron are identified as sheeting. Lead, for example, can be cast into very thin sheets. Copper alloy sheeting (again, usually “Rolled/Sheet”) is also common.

Batch sheeting according to material type. The only measurements that need to be taken are count and weight.

### 8.2.17. STRAIGHT PINS

Straight pins (Form “Pin, straight”) are cataloged slightly differently in the Bronze, Silver, and Gold interfaces, similarly to nails. The differences are noted in the following protocols.

For Completeness, use the same protocols as one would for nails. At the Bronze and Silver levels, choose only “Complete” or “Incomplete.” At the Gold level, choose from “Head,” “Head and Partial Shank,” “Shank,” “Tip and Partial Shank,” “Tip,” or “Complete.” At all levels, incomplete straight pins can be batched by completeness and material, with only weight recorded. At the Bronze level, complete straight pins can also be batched together with only weight recorded. At the Silver and Gold levels, complete straight pins should be cataloged individually with length, weight, and diameter recorded. Length is the complete length of the pin, and diameter is the thickness of the pin shank, measured as close to the middle of the shank as possible. Take both of these measurements using calipers.

Catalog as follows:

<b>Category:</b>	“Metal”
<b>Form:</b>	“Pin, straight”
<b>Completeness:</b>	As appropriate.
<b>Material:</b>	“Copper Alloy” or “Tinned Copper Alloy” if tin plating is present. Tin plating does not need to be recorded as decoration.
<b>Manu Tech:</b>	“Drawn/Wire”
<b>Weight:</b>	Always record weight.
<b>Length:</b>	Record at Gold and Silver levels.

<b>Diameter:</b>	Record at Gold and Silver levels.
<b>Notes:</b>	If the pin head is present, determine whether it was hand-made or stamped. This may require using magnification. Hand-made pin heads were made by wrapping an extra little bit of wire around the end of the shank. According to Hume, machine-stamped heads were invented in 1824 and were made by simply stamping flat the end of the shank. Enter this information in the Notes field.

### 8.2.18 STRAPPING AND HOOP IRON

Iron strapping is any thin, flat, and rectangular segment of iron.

Some iron strapping is made from “Tinned Iron,” which appears, under any corrosion, to be a slightly dull, silvery gray (rather than the solid reddish-brown of regular iron).

Manufacturing Technique for iron strapping is often “Rolled/Sheet.” Some strapping is “Wrought/Forged.” This strapping is slightly thicker and more irregular in shape and thickness than rolled/sheet strapping. Strapping can be distinguished from sheeting in a few ways by its rectangular shape. The two longer edges must be finished edges to determine that an object is strapping.

At the Bronze level, all iron strapping can be batched together with only weight recorded. At the Silver and Gold levels, strapping can be batched by width. For both individual and batched fragments, only width and weight need to be measured. Only record width if the measurement is complete.

“**Barrel Hoop**” and “**Bucket Hoop**” are two specific categories of iron strapping. They are similar forms, but bucket hoop is generally thicker and with a smaller, bucket-sized curvature. Strapping should be cataloged with one of these forms only if it meets one or both of the following two criteria:

1. The fragment of strapping has a definite barrel- or bucket-sized curve. This can generally only be seen on longer segments of strapping.
2. The fragment of strapping includes the two ends that are riveted together.

### 8.2.19. TOOLS

Tools are those objects used to shape or assemble items generally made of wood (e.g., chisels, hammers, planes, etc.). Tools are not part of the finished product. “Tool, unidentified” is a category used for items that appear tool-like – for example, a large iron object with a handle – but cannot be identified to exact form. “Tool, fireplace” includes tools typically arrayed around

a fireplace: pokers, tongs, etc. “Tool, other” is used for identified tools that are too uncommon to justify a specific form, such as a tire iron.

*Note:* Keep in mind that “Handle” is a Completeness option. Use this option if you have the handle of a tool, and record the tool Form as appropriate.

A useful reference for identifying specific iron tools is R.A. Salaman’s *Dictionary of Woodworking Tools Revised Edition*, Astragal Press, New Jersey, 1997.

### 8.2.20. TACK, UNIDENTIFIED

DAACS distinguishes upholstery tacks by the presence of a cast copper alloy head (see below). If there is no cast copper alloy head, or if the head is wrought iron, record the form as “Tack, Unidentified.” Complete and incomplete unidentified tacks have separate cataloging protocols. Unidentified tacks are dealt with in a similar fashion to nails; however, no information is recorded in the Nail Information tab. All tack information is recorded in the Measurements tab or in the Notes field.



#### **Complete Tacks:**

At the **Bronze** level, complete tacks can be batched by material and manufacturing technique with only count and weight recorded. At the **Silver** and **Gold** levels, complete tacks should not be batched. Record the length and weight of each individual tack on the Measurements tab. If a tack is bent, clinched, or pulled, record this in Notes field.

#### **Incomplete Tacks:**

Incomplete tacks can be batched by completeness, material, and manufacturing technique at all cataloging levels. At the **Bronze** and **Silver** levels, record completeness as “Incomplete.” At the **Gold** level, choose from “Head,” “Head and Partial Shank,” “Shank,” “Tip and Partial Shank,” or “Tip.” Record the count and weight only for both individual and batched incomplete tacks. No other information needs to be recorded.

### 8.2.21. TACK, UPHOLSTERY

Upholstery tacks found on historical sites have cast copper alloy heads attached to wrought shanks. We recognize that not all upholstery tacks had cast heads, but tacks with wrought heads could be used for a variety of other purposes. At all cataloging levels, record Completeness only as “Complete” or “Incomplete.”

#### **Complete Tacks:**

Complete upholstery tacks should not be batched. Record the manufacturing technique as “Wrought” for complete tacks.



### Incomplete Tacks:

Incomplete upholstery tacks can be batched by material and manufacturing technique. Manufacturing technique for shanks (recorded as “Incomplete”) should be “Wrought,” but if only the tack head is present, record manufacturing technique as “Cast.” Only record count and weight.

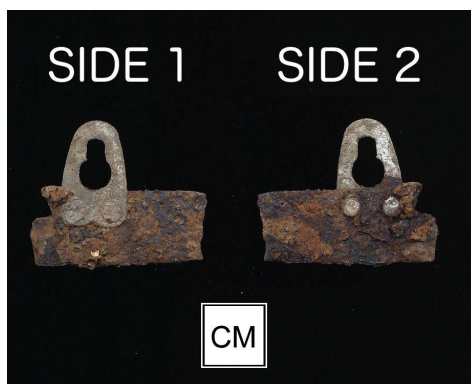
### 8.2.22. HOOK, CLOTHING AND EYE, CLOTHING

Clothing hook-and-eye closures are simple, two-part clothing fasteners used from the colonial period up to the present day with little change in appearance. Catalog as follows:

<b>Category:</b>	“Metal”
<b>Form:</b>	“Hook, clothing” or “Eye, clothing”
<b>Completeness:</b>	“Complete” or “Incomplete,” as appropriate.
<b>Material:</b>	Usually “Copper Alloy,” occasionally “Iron.”
<b>Manu Tech:</b>	“Drawn/Wire”
<b>Measurements:</b>	At Gold and Silver levels, record length, width and height if measurements are complete. Always record weight.

### 8.2.23. FASTENER, CORSET

This term applies to parts of corsets unique to their design. Corsets in the late 19<sup>th</sup> century included long, thin iron straps called busks at the points of attachment to provide stability. Copper alloy slots and studs were attached to the busks on either side for closure. Parts of busks should be recorded as Material “Iron” and Manufacturing Technique “Rolled/Sheet”, while the slots and studs should be recorded as Material “Copper Alloy” and Manufacturing Technique “Stamped.”



Corset busk and slot fragment recovered from East Cabin at Andrew Jackson’s The Hermitage.



Corset busk and slot fragments and period corset with slot and stud closure (image courtesy of the Maryland Archaeological Conservation Laboratory).

#### 8.2.24. UNIDENTIFIABLE FRAGMENTS

Other than nails, the majority of iron to be cataloged is non-diagnostic and unidentifiable. Occasionally, one can identify a fragment as a tool or hardware, but heavy corrosion often prevents any sort of identification. In these cases, list the Form as "Unidentified," the Completeness as "Incomplete," and describe the artifact in the notes. Unidentified iron fragments that measure less than 20 mm can be batched together. No measurements besides count and weight need to be taken. Keep in mind that there is a "Corrosion/Rust" in Form as well; fragments of corrosion should not be cataloged as "Unidentified." Miniscule fragments less than 10 mm do not need to be cataloged and can be discarded. Fragments greater than 20 mm should be cataloged separately and all measurements need to be taken.

Manufacturing technique is often difficult to determine for unidentified iron fragments, especially when heavily corroded. If you cannot determine the technique, use "Indeterminate." Check for uniformity of thickness across the fragment; thicker, uniformly flat iron fragments are usually "Cast." More irregular fragments are most likely "Wrought/Forged."



Keep in mind that there are more specific catch-all Form categories for unidentified objects if you have any diagnostic markers, for example, “Hardware, unidentified”; “Hook, unidentifiable”; “Machinery, unidentified”; and “Tool, unidentified.”

### 8.2.25. WIRE

Unidentified fragments of wire should be cataloged with Form as “Wire.” Wire is usually iron or copper alloy. While Manufacturing Technique is often “Drawn/Wire,” iron wire can be “Wrought/Forged.” Check for the irregularity typical of most wrought artifacts. All non-diagnostic wire can be batched. The only measurements that need to be taken are count and weight.

“Barbed Wire” is usually Iron or Iron Alloy. List the Manufacturing Technique as “Machine Made.” Batch all barbed wire together. The only measurements that need to be taken are count and weight.

“Wire, reinforcing” is the structural wire seen at the edge of metal cans. It is also occasionally seen along the edges of tin and pewter cups. For modern cans, the Manufacturing Technique should be Machine Made. For tin or pewter cups, the Manufacturing Technique should be Wrought/Forged.

### 8.2.26. FURNITURE CASTERS

Two terms apply to furniture casters, depending on the completeness of the object. The wheels on furniture like trays and tables should be recorded as “Furniture, caster.” The sleeve that served as the attachment for the wheel to the base of the furniture leg should be recorded as “Furniture, caster socket sleeve.” See images below.



“Furniture, caster” recovered from the East Cabin of Andrew Jackson’s The Hermitage.



“Furniture, caster socket sleeve”  
(hardwaretree.com)

### 7.2.27 WINDOW CAME

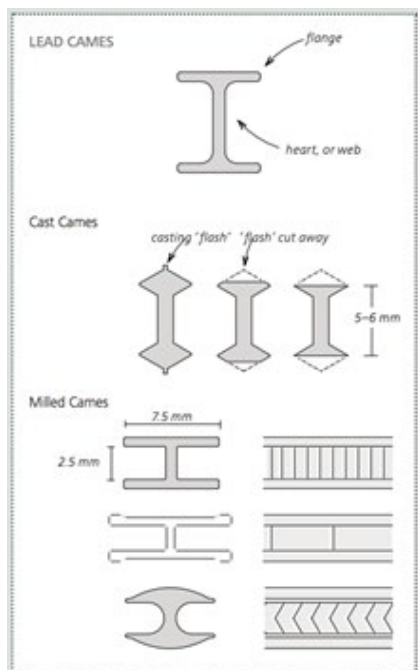
For many centuries, flat glass panes could not be produced in the large sizes needed for windows. As a result, glass windows in 17th and early 18th century structures were composed of multiple smaller diamond or square-shaped glass panes, called “quarries.” Quarries were mounted in a framework of lead strips known as “cames.” These cames were supported by wrought iron bars and set in an iron or wooden frame.

During the Medieval period, window cames were cast in H-shaped molds. Originally, they were carved or cut to the correct size but by the late 15th century, the cast H-shaped rods began to be milled through a “glazier’s vise” or “lead-mill”. The H-shaped cast rod would be squeezed through “a channel consisting of cheeks and transporting wheels, whereby the cheeks determine the size and shape of the flanges, and the width of the wheels determine the height of the [heart]” (Strobl 2019). The result is a thinner, lengthened rod that is a uniform size and shape. Grooves are cut into the wheels to aid in pushing the lead through the mill, which leave corresponding marks on the hearts of the cames (see image below). Indicate if these marks are visible in the notes. Additionally, manufacturers would often stamp the date and the maker’s name at even intervals down the lead came. These dates and names are sometimes found by archaeologists on the interior bar of the H-shaped came. If a date and maker’s name are discernable, provide a detailed description in the Marks and Marks Notes fields on the Decoration tab.



Example of milling marks on window came from PG92, Flowerdew Hundred Plantation.

The default manufacturing technique for window came in DAACS is “Unidentifiable” unless milling marks are present, in which case use “Milled.” Un-milled, cast window came continued to be used after the development of the glazier’s vise, particularly in stained glass. Cast window came is heavier, thicker, and likely will have different dimensions than milled window came (see image below). If the cataloger is unsure of the stage of manufacture, they should enter the manufacturing technique as “Unidentifiable” and indicate in the notes that the came may be cast. If you believe you have an example of cast window came, enter the manu tech as “Cast” and contact the DAACS team directly.



**From Historic England “Glass & Glazing” *Practical Building Conservation* p.101**

Shows the average height and width of window cames and the types of milling marks.

Each piece of window came should be cataloged individually. Record length, width, height, and weight. If the fragment is bent, length should be measured with the soft measuring tape to record the entire length of the fragment as if it had been straightened out. The width should reflect the width of the flange as best as possible and the height should reflect the height of the heart.

Sometimes, cross-shaped joints are found (see images below). In this instance, select form “Window Came Joint.” Record the length measurement of the longest stretch of the window came in the measurements tab. Indicate that the artifact includes a cross-shaped joint and record the length of the shorter stretch in the notes.



Window came joints from PG92, Flowerdew Hundred Plantation

Catalog as follows:

<b>Count:</b>	Catalog each fragment of came individually. Do not batch.
<b>Category:</b>	"Metal"
<b>Form:</b>	"Window Came" or "Window Came Joint"
<b>Completeness:</b>	As appropriate, likely "Incomplete"
<b>Material:</b>	"Lead"
<b>Manu Tech:</b>	Usually "Unidentifiable." Enter "Milled" if indentations from milling process are present or "Cast" if thickness and shape are diagnostic of cast window came.
<b>Measurements:</b>	Record length, width, height, and weight as described above.
<b>Notes:</b>	If the groove is open/visible, check for any markings. Record markings in the notes. If you can tell pane shape from a came joint (diamond or square), add this to notes. Add shorter length(s) of a came joint to notes. Also record in the notes if any pieces of glass are still present in the window came.
<b>Decoration:</b>	If manufacturing date or maker's name is stamped on the came, record this in Marks and Marks Notes.

#### 8.2.28. TENTERHOOKS

Tenterhooks were used primarily by the textile industry to stretch cloth as it was drying. These hooks have a characteristic head that bends away from the shank at 90 degrees. This shape allowed the tenterhook to support the edge of cloth/material it was used to stretch. The exterior angle of the head is 90 degrees while the interior angle is less than 90 degrees due to the thickening of each angle piece at the interior corner. The head tapers to a pointed tip for easy punctuation of the fabric or material that was to be fastened to it. The shank also tapers towards the tip. Tenterhooks found at Jamestown and at Flowerdew Hundred are generally 1-2 in (4-5 cm) in length.

Catalog as follows:

<b>Category:</b>	"Metal"
<b>Form:</b>	"Tenterhook"
<b>Completeness:</b>	"Complete" or "Incomplete"
<b>Material:</b>	"Iron"
<b>Manu Tech:</b>	"Wrought/Forged"
<b>Measurements:</b>	Only record weight.
<b>PMM?:</b>	If the tenterhook demonstrates some form of post-manufacturing modification (e.g., clinching), select "Yes" and describe it in the Notes.



Tenterhooks from PG65 Flowerdew Hundred Plantation

## 8.3. ARCHITECTURAL MATERIALS

### 8.3.1 BRICK, DAUB, AND CHINKING

All brick, daub, and chinking are cataloged with Category “Ceramic.” There are several specific brick forms, but these guidelines apply to general brick, daub, and chinking:

<b>Count:</b>	The total number in the batch.
<b>Category:</b>	“Ceramic” (Use this for all Brick, Daub, and Chinking)
<b>Form:</b>	See specific form descriptions below.
<b>Brick Color:</b>	Use the Paste Color sheets in the DAACS Color Book. The typical colors are “Orange,” “Red,” and “Reddish Brown.”
<b>Completeness:</b>	“Complete” or “Incomplete”
<b>Material:</b>	“Brick”, “Brick/Daub”, “Daub” or “Chinking”
<b>Manu Tech:</b>	“Hand-made” or “Machine Made”

The following are the six most common brick-related forms:

- **“Brick/Daub”:** This is the most commonly used form when cataloging brick materials. Use when you have brick/daub/chinking fragments that do not meet the diagnostic criteria for any of those forms; for example, bricks that do not have an original surface,

or possible daub fragments with no discernible evidence of lathe or twig impressions. Brick/daub can be batched by color.

**Category:** "Ceramic"  
**Form:** "Brick/Daub"  
**Brick Color:** As appropriate.  
**Completeness:** "Incomplete"  
**Material:** "Brick/Daub"  
**Manu Tech:** "Hand-made"  
**Measurements:** Only record weight.

- **"Brick Fragment":** Use when a fragment has part of at least one original brick surface. The default material is "Brick, red," although other colors exist and should be chosen as appropriate. Do not batch brick fragments that have one complete measurable dimension. These should be cataloged individually with the measurement recorded in the appropriate field. All other fragments can be batched and weighed by brick color/material and manufacturing technique. No other measurements need to be taken for batched brick.

**Category:** "Ceramic"  
**Form:** "Brick Fragment"  
**Brick Color:** As appropriate.  
**Completeness:** "Incomplete"  
**Material:** "Brick, red" or as appropriate.  
**Manu Tech:** "Hand-made" or "Machine Made"\*  
**Measurements:** Only record weight unless a complete original dimension is measurable.

\*Manufacturing Technique will typically be "Hand-made." Occasionally, one sees modern, machine-made bricks. These are more regular and homogenous than hand-made bricks, and do not have the sandy surfaces often seen on hand-made bricks.

- **"Brick Bat":** Use when the brick has two complete, measurable dimensions (almost always width and height). These original dimensions should be recorded in the Measurements Tab. Leave the field for the incomplete dimension blank. Always record Weight. The default Material is "Brick, red", although other colors exist and should be chosen as appropriate. Do not batch brick bats.

**Category:** "Ceramic"  
**Form:** "Brick Bat"  
**Brick Color:** As appropriate.  
**Completeness:** "Incomplete"  
**Material:** "Brick, red" or as appropriate.  
**Manu Tech:** "Hand-made" or "Machine Made"\*

**Measurements:** Record weight and all complete dimensions.

\*Manufacturing Technique will typically be “Hand-made.” Occasionally, one sees modern, machine-made bricks. These are more regular and homogenous than hand-made bricks, and do not have the sandy surfaces often seen on hand-made bricks.

- **“Brick, whole”:** Use when a brick is complete, with three original, measurable dimensions. Use this form only for generic, rectangular bricks; see below for specialty brick forms. The original dimensions and the weight should be recorded in the Measurements Tab. The default Material is “Brick, red”, although other colors exist and should be chosen as appropriate. Do not batch whole bricks.

**Category:** “Ceramic”  
**Form:** “Brick, whole”  
**Brick Color:** As appropriate.  
**Completeness:** “Complete”  
**Material:** “Brick, red” or as appropriate.  
**Manu Tech:** “Hand-made” or “Machine Made”\*  
**Measurements:** Record length, width, height, and weight.

\*Manufacturing Technique will typically be “Hand-made.” Occasionally, one sees modern, machine-made bricks. These are more regular and homogenous than hand-made bricks, and do not have the sandy surfaces often seen on hand-made bricks.

- **“Daub”:** Fired clay/brick-like material that has twig or lath impressions. Occasionally one will have a tremendous amount of daub from one context, including some fragments without twig or lath impressions that are still clearly daub. Go ahead and catalog these fragments as daub, even if they do not all have impressions.

**Category:** “Ceramic”  
**Form:** “Daub”  
**Brick Color:** “Not Applicable”  
**Completeness:** “Incomplete”  
**Material:** “Daub”  
**Manu Tech:** “Hand-made”  
**Measurements:** Record all measurements for fragments 65 mm and larger.  
Otherwise only record weight.  
**Notes:** Indicate the number of sides with twig/lath impressions. Note any evidence of finger impressions.

- **“Chinking”:** Fired clay/brick-like material that has log impressions. Occasionally one will have a tremendous amount of chinking from one context, including some fragments without log impressions that are still clearly chinking. Go ahead and catalog these fragments as chinking, even if they do not all have impressions.

**Category:** "Ceramic"  
**Form:** "Chinking"  
**Brick Color:** "Not Applicable"  
**Completeness:** "Incomplete"  
**Material:** "Chinking"  
**Manu Tech:** "Hand-made"  
**Measurements:** Record all measurements for fragments 65 mm and larger. Otherwise only record weight.  
**Notes:** Indicate the number of sides with log impressions. When two or more sides have log impressions, record the general shape (wedge, etc.) and any information about the spatial relationship between the impressions (parallel or perpendicular). Note any evidence of finger impressions.

#### Batching Rules for Daub and Chinking:

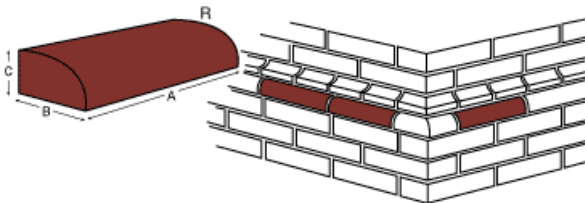
First, divide the fragments into groups based on the number of sides each has with twig/lath or log impressions. For each group, batch all fragments 60mm and smaller, recording only count and weight. Indicate in the Notes the number of sides with impressions.

All fragments 65mm and larger are cataloged individually, with all measurements recorded. When fragments of chinking have two or more sides with log impressions, record in the Notes the general shape (wedge, etc.) and any information about the spatial relationship between the impressions (parallel or perpendicular). Any evidence of finger impressions should also be recorded in the Notes.

#### Specific Brick Forms:

There are several types of specialty bricks whose forms are listed separately in DAACS. Note: The images below are examples of what each brick type might look like – not all bricks will appear exactly like those pictured. For all specialty bricks, select the appropriate form even if the brick is incomplete. Record weight and any complete dimensions.

- **"Brick, bullnose":** Brick with one or more edges rounded off rather than at a right angle.



- **"Brick, column 1":** Brick in the shape of a wedge or "pie slice" with a curved exterior edge, used in column construction.

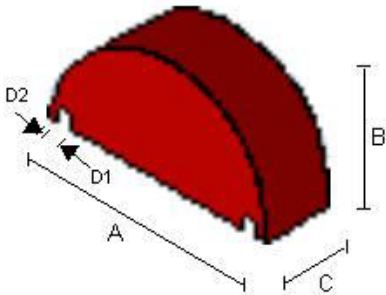




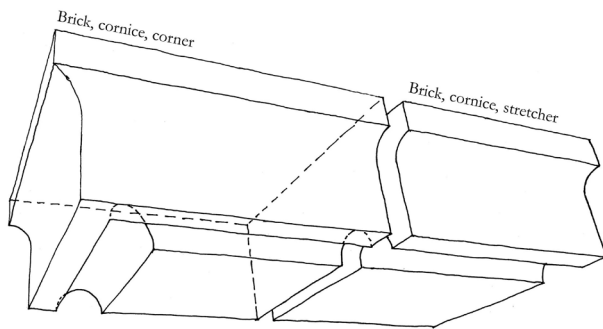
- **“Brick, column 2”**: Brick with a curved, long exterior edge and a straight interior edge, used in column construction.



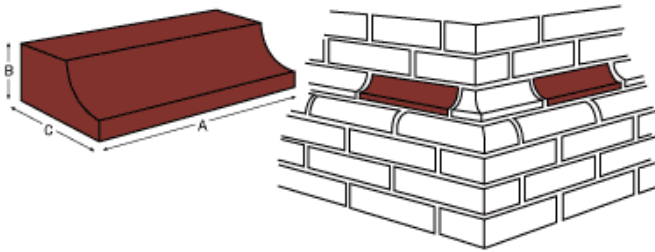
- **“Brick, coping”**: Brick that is rounded or gabled to redirect water from the top of a structure.



- **“Brick, cornice”**: A molded, concave curved brick, usually part of a projecting ornamental course.



- **“Brick, water table”**: A beveled, shaped, or molded brick at the top of a masonry projection that forms a shelf used to guide water away from structural foundations.



- **“Brick, specialty unid.”**: Use this term when a brick is not a plain, rectangular shape but you cannot determine the exact type of specialty brick form.

#### Additional Notes on Brick:

- If a brick or brick fragment has mortar attached to one or more surfaces, list the Category as “Composite” and add both brick and mortar in the Material field.
- When batching brick fragments, catalog burned and unburned fragments separately.
- Occasionally, one will see bricks with one or more glazed surfaces. This can be an incidental result of the firing conditions or an intentional design choice. Glazed bricks and brick fragments should be cataloged separately from unglazed ones. Note that the fragments are glazed in the Notes field.

### 8.3.2. ROOF AND FLOOR TILES

Ceramic/earthenware roofing and flooring tiles have been recovered from 17<sup>th</sup> and 18<sup>th</sup> century households in Colonial-era North America and the Caribbean. The most common forms of roofing tiles were generally rectangular, roughly 10” x 6” x ½” and relatively flat. Both surfaces are unglazed. Roof tiles have two perforations through which nails or pegs would be inserted to anchor the tile to the roof frame (Noel Hume 1969:294-5).

The primary differentiating factor between roofing and floor tiles is thickness. Roofing tiles are typically no thicker than about ½” and floor tiles are as thick as and thicker than 1.” Additionally, floor tiles have holes in the corners, but the holes do not completely perforate both surfaces of the tile.



Mended complete roof tile from PG65 Flowerdew Hundred Plantation



Roof tile fragments PG92, Flowerdew Hundred Plantation

If a fragment has two finished surfaces and its thickness is equal to or less than  $\frac{1}{2}$  inch thick, catalog it as a roofing tile:

**Count:** 1 or as appropriate (Do not batch tiles or tile fragments where thickness can be measured).

**Category:** "Ceramic"

**Form:** "Tile, roofing"

**Completeness:** "Complete" or "Incomplete"  
**Material:** "Earthenware"  
**Manu Tech:** "Molded"  
**Measurements:** Record thickness of tile in the height field. Record length and width if measurements are complete. Always record weight.  
**Notes:** If the tile has perforations, record the number of perforations in the notes and note that the perforation goes completely through the body of the tile.

If a fragment has two finished surfaces and its thickness is greater than 1 inch thick, catalog it as a floor tile:

**Count:** 1 or as appropriate (Do not batch tiles or tile fragments where thickness can be measured).  
**Category:** "Ceramic"  
**Form:** "Tile, floor"  
**Completeness:** "Complete" or "Incomplete"  
**Material:** "Earthenware"  
**Manu Tech:** "Molded"  
**Measurements:** Record thickness of tile in the height field. Record length and width if measurements are complete. Always record weight.  
**Notes:** If the tile has perforations, record the number of perforations in the notes and note that the perforation does not go completely through the body of the tile.

**For mended tiles:** Include the artifact IDs of the mendable fragments in the notes. Include the dimensions of the mended object if they are complete. For example: "This fragment mends to artifacts XXXXX and XXXXX. The overall complete dimensions of the mended object are: Length: XX mm; Width: XX mm; Height (or thickness): XX mm. Mended Weight: XX g."

### 8.3.3. PLASTER AND MORTAR

The following protocols were developed by DAACS Staff and Dr. Sara Bon-Harper of James Monroe's Highland in November 2022.

Cataloging archaeological assemblages with large quantities of architectural material poses challenges for identifying and distinguishing plaster and mortar. Historic plaster and mortar are often similar in composition and appearance, especially when found in a fragmentary and eroded state with no original surfaces. The following section provides definitions and diagnostic attributes for both plaster and mortar, followed by protocols for cataloging these artifacts based on their observable diagnostic attributes.

**Plaster** is a lime-based composite material that is spread onto walls and ceilings, forming a smooth, hard surface when dried. Plaster is generally applied directly onto a brick wall or onto a frame of wooden slats (lath), which leave visible impressions on the interior surface of the

plaster. In the 17<sup>th</sup> and 18<sup>th</sup> centuries, most plaster walls and ceilings were applied in one thick layer of coarse plaster, sometimes with a thin layer of limewash (a fine mixture of slaked lime and water) applied on top.

By the 19<sup>th</sup> century, the three-coat plaster system became the standard for interior plaster application. These coats, in order of application, are the *scratch coat*, *brown coat*, and *finish coat*. The *scratch coat* is a fairly thick layer of coarse plaster applied directly to the brick or lath. It is gray to tan in color, moderately friable, and often has sand and/or horsehair inclusions. The exposed surface of the scratch coat is roughened or “scratched” to help the next coat adhere. The *brown coat* is then applied directly to the scratch coat and the exposed surface is smoothed. It is tan to brown in color, usually with finer inclusions than the scratch coat and a denser, harder consistency. The *finish coat* is a much thinner layer of fine, chalky, lime-rich plaster. This is the layer that will be visible, so it is much smoother and brighter white in appearance. Occasionally, a much thinner layer of whitewash will be applied to the brown coat rather than a finish coat.

**Mortar** is a composite material used to bind and seal gaps between bricks or stones in construction. Modern mortar is made with cement, but historic mortar can have a very similar composition to plaster, particularly scratch coat plaster. It tends to be very friable, sandy, and includes a considerable amount of lime.

Due to their similarities, it is often impossible to distinguish archaeological fragments of mortar and plaster. In some cases, it is useful to take the context of the artifacts into account. One would expect to see plaster when excavating the interior of a structure, while in other cases, mortar may be the more likely identification. However, there are many contexts where one could expect to see both plaster and mortar, and in general, it is best to be conservative when making identifications. The following forms and protocols were developed with these cases in mind.

#### **“Plaster/Mortar, undiagnostic”:**

Use this form when you have a fragment with no lath impressions, finishes, original flat surfaces, shaping, or visible layers in cross-section. These fragments could be eroded mortar or plaster. For some extremely large assemblages of architectural materials in DAACS, project administrators have chosen to consider all fragments below a certain size cut-off (e.g., 25 mm) “Plaster/Mortar, undiagnostic” to expedite the cataloging process. Project administrators should consult with DAACS staff to establish protocols in these cases. Undiagnostic plaster/mortar may be batched.

Catalog as follows:

<b>Category:</b>	“Composite”
<b>Form:</b>	“Plaster/Mortar, undiagnostic”
<b>Completeness:</b>	“Incomplete”
<b>Material:</b>	“Plaster/Mortar”
<b>Manu Tech:</b>	“Handmade”

**Measurements:** Only record weight.

**Notes:** Note if any size cut-off was used.

**“Plaster/Mortar, flat surface”:**

Use this form for fragments that have a flat surface but are still not clearly identifiable as plaster. These fragments may be harder and less friable than typical plaster, have an unusual color, and lack any diagnostic attributes of plaster. This form exists because mortar can occasionally spall off of masonry with a flat surface intact. However, most fragments with a flat surface can generally be identified as plaster.

Catalog as follows:

**Category:** “Composite”  
**Form:** “Plaster/Mortar, flat surface”  
**Completeness:** “Incomplete”  
**Material:** “Plaster/Mortar”  
**Manu Tech:** “Handmade”  
**Measurements:** Only record weight.

**“Plaster, flat surface”:**

Use this form for fragments that have at least one flat, smoothed surface and no visible lath impressions. The flat surface may have a finish coat or other applied treatment such as paint or whitewash. In these cases, the finished surface will be captured in the Decoration tab (see below). In other cases, both surfaces may be flat with no finish. These fragments are likely brown coat layers that have become detached from the other coats. Fragments with no finished surface can be batched, and fragments with the same type of finished surface can be batched.

Catalog flat plaster fragments with no finished surface as follows:

**Category:** “Composite”  
**Form:** “Plaster, flat surface”  
**Completeness:** “Incomplete”  
**Decoration?** “No”  
**Material:** “Plaster”  
**Manu Tech:** “Handmade”  
**Measurements:** Only record weight.

Catalog flat plaster fragments with a visible finish (finish coat, whitewash, paint, pigment, etc.) as follows:

**Category:** “Composite”  
**Form:** “Plaster, flat surface”

**Completeness:** "Incomplete"

**Decoration?** "Yes"

**Material:** "Plaster"

**Manu Tech:** "Handmade"

**Measurements:** Only record weight.

**Decoration**

**Technique:** "Finished Surface, unid."

**Applied Color:** As appropriate, typically "White"

**Decoration**

**Notes:** Describe the type of finished surface: finish coat, whitewash, etc.

**"Plaster, lath impressions":** Use this form for fragments that have lath impressions and/or keys on one side and no flat surface on the other side. Lath impressions are horizontal striations of varying thickness created by pushing the plaster against the wooden slats of a lath frame.

"Keys" are tightly curved pieces of plaster that are formed by the scratch coat plaster being pushed through the slats of the lath. This is an important part of the plaster application process, as the keys help ensure that the plaster structurally adheres to the lath. Occasionally, keys are found on their own, having broken off from the larger fragment of scratch coat plaster. They can be distinguished from decoratively molded plaster by their irregular shape, presence of lath impressions, and the coarse consistency of the scratch coat plaster. Plaster with lath impressions can be batched. Detached plaster keys may be batched and cataloged separately if desired.



Plaster keys protruding through the back side of the lath frame.





Plaster keys that have detached from larger scratch coat fragments.

**“Plaster, lath to flat”:**

Use this term for plaster fragments that have lath impressions and/or keys on one surface and a flat, smoothed surface on the other. The flat surface may have a finish coat or other applied treatment such as paint or whitewash. In these cases, the finished surface will be captured in the Decoration tab (see below). In other cases, the smoothed surface may be flat with no finish. These fragments are likely scratch coat layers with the brown coat detached, or both the scratch and brown coat with the finished surface detached. Fragments with no finished surface can be batched, and fragments with the same type of finished surface can be batched.

Catalog lath-to-flat plaster fragments with no finished surface as follows:

**Category:** “Composite”  
**Form:** “Plaster, lath to flat”  
**Completeness:** “Incomplete”  
**Decoration?** “No”  
**Material:** “Plaster”  
**Manu Tech:** “Handmade”  
**Measurements:** Only record weight.

Catalog lath-to-flat plaster fragments with a visible finish (finish coat, whitewash, paint, pigment, etc.) as follows:

**Category:** “Composite”  
**Form:** “Plaster, lath to flat”  
**Completeness:** “Incomplete”  
**Decoration?** “Yes”  
**Material:** “Plaster”  
**Manu Tech:** “Handmade”  
**Measurements:** Only record weight.



**Decoration**

**Technique:** "Finished Surface, unid."

**Applied Color:** As appropriate, typically "White"

**Decoration**

**Notes:** Describe the type of finished surface: finish coat, whitewash, etc.

**"Plaster, shaped":**

Use this term for fragments of intentionally molded plaster with distinctive angles, curvature, or shapes. This includes crown moldings, chair rails, baseboard molding, and molded frames around a window or doorframe. Shaped plaster is generally composed of finish coat plaster, which is bright white and chalky with few inclusions. Fill out the Decoration tab as above for plaster with a finished surface, and add an additional decorative element if decorative molding is present. Catalog shaped plaster individually.

Catalog shaped plaster as follows:

**Category:** "Composite"

**Form:** "Plaster, shaped"

**Completeness:** "Incomplete"

**Decoration?** "Yes"

**Material:** "Plaster"

**Manu Tech:** "Handmade"

**Measurements:** Record length, width, height, and weight.

**Decoration**

**Technique:** "Finished Surface, unid." and "Molded," if applicable.

**Applied Color:** As appropriate, typically "White," for the finished surface; "No Applied Color" for the molded element.

**Decoration**

**Notes:** Describe the type of finished surface (finish coat, whitewash, etc.) and the molding, if present.

**"Plaster/Mortar, conglomeration":**

Use this form for accreted masses composed primarily of plaster and/or mortar. This term was created specifically for the assemblage of architectural materials from James Monroe's Highland, which was heavily damaged by a house fire resulting in many large conglomerations of melted and burned materials. Although individual fragments of plaster with diagnostic attributes may be visible within the conglomerations, it is more expedient to catalog the conglomerations as undiagnostic plaster/mortar given the degree of damage to the materials. Occasionally, other material types such as brick and charcoal may be present in the conglomerations; in these cases, add the additional materials and manufacturing techniques on the main tab. Plaster/mortar conglomerations can be batched and weighed with no count recorded.

Catalog plaster/mortar conglomerations as follows:

**Count:** Select "This artifact cannot be counted."  
**Category:** "Composite"  
**Form:** "Plaster/Mortar, conglomeration"  
**Completeness:** "Incomplete"  
**Decoration?** "N/R"  
**Material:** "Plaster/Mortar," additional materials if appropriate.  
**Manu Tech:** "Handmade," additional manu techs if appropriate.  
**Measurements:** Record weight.

#### **"Mortar":**

Use this term for artifacts that can be confidently identified as mortar based on their shape, composition, context, or other diagnostic attributes such as the presence of brick attached to surfaces. If mortar does have brick or other construction materials attached to it, record these as additional materials on the Main tab. Note that a fragment that is primarily brick with traces of mortar should be cataloged with the appropriate brick form with "Mortar" as an additional material. Fragments of mortar can be batched together.

Catalog as follows:

**Category:** "Composite"  
**Form:** "Mortar"  
**Completeness:** "Incomplete"  
**Decoration?** "No"  
**Material:** "Mortar," additional materials if appropriate.  
**Manu Tech:** "Handmade," additional manu techs if appropriate.  
**Measurements:** Only record weight.

#### **8.3.4. CEMENT AND CONCRETE**

Cement and concrete are composite materials used for construction and paving. They have similarities to plaster and mortar, especially modern mortar, which typically uses cement as a binding agent. Generally, cement and concrete are denser, grittier, and have more variable inclusions. Concrete is cement with large sand and/or rock inclusions, which increase its durability. Due to their similarities in appearance and use, cement and concrete are not listed as separate forms in DAACS. Cement and concrete of the same type may be batched together.

Cement should always be cataloged as following:

**Category:** "Composite"  
**Form:** "Cement, unidentified"  
**Completeness:** "Incomplete"  
**Material:** "Cement/Concrete" or "Cement, possible TJ"

**Manu Tech:** "Indeterminate"

Portland cement should be cataloged as following:

**Category:** "Composite"  
**Form:** "Cement, portland"  
**Completeness:** "Incomplete"  
**Material:** "Cement/Concrete"  
**Manu Tech:** "Machine Made"

Concrete should be cataloged as following:

**Category:** "Composite"  
**Form:** "Cement, unidentified"  
**Completeness:** "Incomplete"  
**Material:** "Cement/Concrete"  
**Manu Tech:** "Indeterminate" if it is unclear whether it was laid by hand or machine or "Machine-Made" if you have evidence of the aggregator.

## 8.4. MISCELLANEOUS ARTIFACTS

### 8.4.1. GASTROLITHS

A small, heavily eroded stone may be is a gastrolith, also called stomach stone or gizzard stone. Stone gastroliths are cataloged in the General Artifact Table with the form as "Gastrolith." Record Category as Stone. Material should be identified accordingly, while Completeness and Manufacturing Technique should be Unidentifiable.

All measurements should be taken and a brief description should be noted with the following statement: "Currently, there is a debate about whether these stones are gastroliths (a.k.a. gizzard stones) or gaming pieces."

PLEASE NOTE: Glass gastroliths should be cataloged in the Glass Table while and Ceramic gastroliths should be cataloged in the Ceramic Table.

### 8.4.2. MARBLES, TOY

Toy marbles can be divided into three categories based on material:

- **Ceramic marbles:**  
These include marbles made from the following materials:  
Earthenware (clay), Stoneware, and Porcelain

**Category:** "Ceramic"  
**Form:** "Marble, toy"

**Material:** "Earthenware" (please note: do not use "Clay"), "Stoneware" or "Porcelain" as appropriate  
**Manu Tech:** "Hand-made"  
**Measurements:** Record weight and diameter.

- **Stone marbles:**

Stone marbles were manufactured from many stones including marble, agate, limestone, and flint (recorded as "Chert/Flint, other" in DAACS).

**Category:** "Stone"  
**Form:** "Marble, toy"  
**Material:** "Marble", "Limestone", "Chert/Flint, other", "Stone, unidentified" as appropriate  
**Manu Tech:** "Ground"  
**Measurements:** Record weight and diameter.

- **Glass marbles:**

**Category:** "Glass"  
**Form:** "Marble, toy"  
**Material:** "Glass"  
**Manu Tech:** "Machine made" or "Molded" as appropriate. (Note that molded marbles should have evidence of a pontil mark.)  
**Measurements:** Record weight and diameter.

### 8.4.3. MODERN ARTIFACTS

From September 2004, we began batching all modern artifacts, regardless of category, form, material, and manufacturing technique. This decision was made because a large area of one site at Monticello (Site 8) was used as a modern dumping ground and certain quadrats contained large quantities of modern artifacts. The PI or DAACS Research Consortium Partner should decide on a site-by-site basis whether to follow these protocols or to catalog modern artifacts individually.

Batched modern artifacts should be cataloged as follows:

**Count:** The total number of modern artifacts in the batch.  
**Category:** "Modern"  
**Form:** "Modern Artifacts"  
**Completeness:** "Not Recorded"  
**Material:** "Not Recorded"  
**Manu Tech:** "Not Recorded"  
**Notes:** Provide a brief list of the batched artifacts. If there is an easily identifiable artifact that provides the latest TPQ (such as pull tabs, plastic straws, etc.), record that specific form in the Notes.  
**Weight:** Weigh batched artifacts in grams.

**Burned?:** "N/R"  
**PMM?:** "N/R"

Fragments of modern **"Road Paving"** can be batched. The only measurement to be taken is weight. Catalog as follows:

**Category:** "Composite"  
**Form:** "Road Paving"  
**Material:** "Asphalt"  
**Manu Tech:** "Machine Made"

Fragments of modern tar paper can be batched. Due to the high fragmentation of tar paper, it should not be counted, only weighed. Catalog as follows:

**Count:** Select "This artifact cannot be counted."  
**Category:** "Synthetic"  
**Form:** "Tar Paper"  
**Material:** "Tar"  
**Manu Tech:** "Machine Made"

#### 8.4.4. MUSICAL INSTRUMENTS

There are several types of musical instruments listed in DAACS, including Harmonicas, Accordions, and Jaw Harps.

Harmonicas and Accordions both have several types of parts listed under Form (for example, "Harmonica, Plate" and "Harmonica, Plate and Reed"). If the part you have fits one of these categories, list it as such. If not, enter in simply "Harmonica" and describe in the notes what parts you have.

Jaw harps, also known as mouth harps or "Jew's harps," are listed in DAACS as "Jews/Jaw Harp." When found archaeologically, the metal tang that one plucks to play the harp is almost always missing. Record in the Notes whether or not the harp still has its tang.

For any other musical instruments not specifically listed in DAACS, catalog as "Musical Instrument, unid." for Form and then describe the artifact in the Notes.

#### 8.4.5. PENCILS

Catalog slate pencils as follows:

**Material:** "Stone"  
**Form:** "Pencil, slate"  
**Completeness:** "Incomplete" or "Complete" as appropriate  
**Material:** "Slate"

**Manu Tech:** "Carved"  
**Notes:** Indicate any use wear.

Occasionally, one finds the graphite part of modern pencils. This "pencil lead" should be cataloged as follows:

**Material:** "Mineral"  
**Form:** "Pencil, lead"  
**Completeness:** "Incomplete" or "Complete" as appropriate  
**Material:** "Graphite"  
**Manu Tech:** "Machine Made"

#### 8.4.6. PIGMENT, UNPROCESSED

Follow these protocols when recording raw material that was used to alter the color of a substance to create paint.

**Material:** "Mineral"  
**Form:** "Pigment, Unprocessed"  
**Completeness:** "Incomplete"  
**Material:** "Lead, red"  
**Manu Tech:** "Natural"

#### 8.4.7. SCRAP/WASTE

"Scrap/Waste" should be used to define any scrap material that is removed or discarded during the manufacturing process. This primarily refers to scrap metal, although remnants of bone from the production of a bone tool are also considered "Scrap/Waste."

Scrap must have clear attributes indicating it has been removed and discarded from a larger object. Diagnostic attributes of scrap include straight or jagged/snipped edges that suggest the material has been cut, sliced, or otherwise removed from a larger whole.

Note that casting waste should be cataloged as "Casting Waste," not "Scrap/Waste" (see below).

#### 8.4.8. CASTING WASTE

Casting waste is a subcategory of scrap/waste that is designated using a separate term because of its distinctive shape and the fact that it is a product of a particular process -- casting. It is almost always lead, although pewter and copper alloy waste from the casting process has been found. The term "Casting Waste" is used to describe the remnants of molten metal that dripped out of the mold during the casting process and then solidified on a flat surface. Waste from the casting process often takes the form of small droplets, irregular, elongated lumps, or larger

solidified blobs. Often these blob-like fragments will have one flattened side created from the molten metal dripping onto a flat surface. In contrast, the opposite side is uneven or undulating because it was exposed to air while it solidified instead of another hard surface. The solidified mass may also have voids because the metal did not spread out evenly as it cooled and hardened.

Note that waste from the casting process with a more amorphous shape should be distinguished from waste that was clearly cast into a channel, which is known as sprue (see Sprue description in section 8.2.10).

Casting waste can be batched. The only measurement that needs to be taken is weight. Catalog as follows:

<b>Category:</b>	“Metal”
<b>Form:</b>	“Casting Waste”
<b>Completeness:</b>	“Incomplete”
<b>Material:</b>	As appropriate, usually “Lead”
<b>Manu Tech:</b>	“Cast”

#### 8.4.9. SLAG

Slag is a by-product from smelting, welding, or other metallurgical and combustion processes. Slag is primarily comprised of impurities in the metals or ores that melt out of the metal while it is being processed. It is composed primarily of silica with some metals and other impurities. As slag is often poured off onto the ground during smelting, it is not unusual to see sand, rocks, charcoal, and even the occasional artifact embedded in the surface of the slag. Slag typically resembles an amorphous chunk of molten glass and metal with gas bubbles and air pockets of various sizes. It can appear in a range of colors, depending on the impurities that are present. It is generally lightweight due to the air pockets, but it may be denser depending on its composition and the presence of embedded materials.

In DAACS, slag also encompasses materials that are sometimes called “clinker.” Clinker is a term specifically used to describe by-products from burning coal; it is composed of all of the volatile impurities that are removed from coal when it is heated, but which are not destroyed by the heat. When coal is burned in a forge, these impurities solidify at the bottom of the hearth and are routinely removed. Like slag, clinker can vary in appearance. It is usually amorphous and globular and may have embedded ash and cinder. Clinker is also generally denser and not as iridescent or metallic as slag. That said, slag and clinker are often composed of similar materials and may be difficult to distinguish archaeologically. For this reason, both are considered “Slag” in DAACS, and all slag/clinker can be batched together.

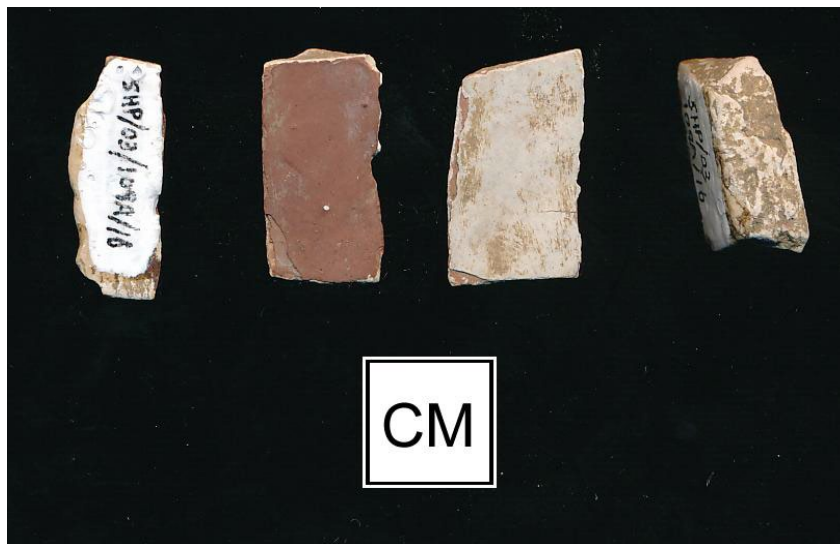
Catalog slag/clinker as follows:

<b>Category:</b>	"Composite"
<b>Form:</b>	"Slag"
<b>Completeness:</b>	"Incomplete"
<b>Material:</b>	"Unidentified"
<b>Manu Tech:</b>	"Indeterminate"
<b>Measurements:</b>	Only record weight.
<b>Notes:</b>	If you are certain that a fragment is iron-related (slag) or coal-related (clinker), record this in the notes.

#### 8.4.10. WINDOW GLAZING

The components that hold window glass in place and seal out weather are referred to as window glazing. Modern window glazing is a compound made from petroleum and gypsum whereas historic glazing was a gypsum/clay, plaster-like mixture. Since it is difficult to tell the difference between the two visually, catalog window glazing as follows:

<b>Category:</b>	"Composite"
<b>Form:</b>	"Window Glazing"
<b>Completeness:</b>	"Incomplete"
<b>Material:</b>	"Window/glazing putty"
<b>Manu Tech:</b>	"Indeterminate"



Fragments of window glazing from West Garden site, Stratford Hall Plantation

#### 8.4.12 SHOE PARTS: METAL, LEATHER, AND RUBBER

This section summarizes how parts of shoes are cataloged with respect to the forms in DAACS.

- "Shoe, guard"



Historically, this term referred to additional pieces of fabric, rubber, or leather that were fastened over shoes to protect them. “Shoe, guard” should only be used if you have a finished edge or seam of a shoe fragment that shows no evidence of attachment to a sole.

- **“Shoe, tip”**

Stamped metal fragments with nail holes that extended out over the tip of the shoe from the sole, between the shoe upper and shoe sole. As far as our research has shown, these plates were exclusive to the tip of the shoe and were not used on the heel. These are predominantly copper alloy.



A) Brogue work shoe with shoe tip

B) Child's shoe with shoe tip

A)

B) <http://www.metmuseum.org/art/collection/search/104091>

Shoe tips recovered from Andrew Jackson's The Hermitage plantation are stamped with the patent date Nov. 29 1859. Part of this patent states: : “A shoe tip, as an article of manufacture, formed into shape in such a manner as to allow of its being applied and fastened to the toe part of shoes or boots by sewing or pegging it between the upper and the sole.”

(<https://patents.google.com/patent/USRE1339E/en?q=shoe&q=silverthorn&q=tip&before=19000101>)

- **“Shoe, tap”**

Stamped metal fragments, typically iron, nailed to the sole or heel for reinforcement. Shoe taps did not extend beyond the shoe sole.



Shoe taps recovered from the East Cabin at Andrew Jackson's The Hermitage.

- **“Shoe Upper”**

This term applies to pieces of rubber or leather that are complete enough to determine that the fragment was part of a shoe upper rather than a shoe sole, or that have evidence of grommets for laces.

- **“Shoe Sole”**

Material should be rubber, leather, or plastic (modern). Term used for any fragment of shoe sole with evidence of nail holes. Sole is also encompassing for shoe fragments when you cannot determine whether the leather is part of an upper or sole. In addition, fragments with evidence of shoe sole and heel are cataloged as “Shoe sole,” and presence of heel recorded in the Notes (see heel definition below).

- **“Shoe, heel”**

Material should be rubber or leather. Term should be used when the shape of the heel is discernible and no other part of the shoe sole is intact. If there is no evidence of heel shape (typically a rounded U), then fragments are cataloged as “Shoe sole.”



#### 8.4.13. PARASOL/UMBRELLA PARTS

This section summarizes how parts of parasols are cataloged with respect to the forms in DAACS.

- **“Parasol/Umbrella, other”**

This term encompasses handle parts, finials, and ferrules.

- **“Parasol/Umbrella, stretcher/rib”**

Stretchers and ribs are visually similar to each other and it can be difficult to differentiate between them when the tip or end is not present. This term encompasses stretchers and ribs that can be identified as such and fragments that cannot be identified to either form. Please record in the Notes if you can identify definitively as a stretcher or rib. Stretcher tips have a single hole through the end for attachment. Rib tips are more decorative and have an attachment hole closer to the attachment with the rib shaft.



End of stretcher that attached to rib, recovered from East Cabin at Andrew Jackson's The Hermitage.



Stretcher tip, recovered from East Cabin at Andrew Jackson's The Hermitage.



Rib tip, recovered from Bowles' Lot site Albemarle County, VA.

- **"Parasol/Umbrella, slider/top-notch"**

This term includes complete or fragmented parasol sliders that connected to stretcher tips and top-notches that held the end of the ribs. Top-notches look similar to sliders, but they are smaller and have an iron pin across the center. Use this term if they had either a slider or a top-notch, or a fragment that was clearly one of these but they could not definitively say was in either category



Slider or top-notch fragment.  
Recovered from East Cabin at Andrew Jackson's The Hermitage.



Top-notch with iron pin intact.



Antique parasol with slider and stretchers in place (image courtesy of Maryland Archaeological Conservation Laboratory).

## 8.5. ORGANIC ARTIFACTS

The "Organic" category of artifacts includes naturally occurring organic materials, as well as artifacts made from modified organic materials. Organic artifacts are batched by Form. The only measurements that need to be taken are count and weight, unless otherwise specified below.

### 8.5.1. MISCELLANEOUS ORGANIC

Completely unidentifiable organic material should be cataloged with Form as "Misc. Organic." At Monticello, this designation has also been applied to currently unidentified organics

recovered from waterscreen and flotation samples. Select Material "Organic" and Manufacturing Technique "Natural." Only record count and weight.

### 8.5.2. BEANS

There are four types of beans specifically listed under Form: "Bean, common," "Bean, cowpea," "Bean, lima" and "Bean, pea." If another type of bean can be positively identified, ask the DAACS administrator to add it to the list. Unidentified beans should be cataloged as "Bean, unid." Material is "Organic" and Manufacturing Technique is "Natural."

### 8.5.3. CHARCOAL

Charcoal is the black carbon residue from burning wood (and other organic matter) at high temperatures in an environment that lacks oxygen. It is pure black in color and very light weight. Archaeologically, it is often very soft and can fragment easily. Charcoal can be produced naturally or be man-made in charcoal kilns. When not a byproduct of natural burning, man-made charcoal was most often used as a metallurgical fuel. Due to the high fragmentation of charcoal, it should not be counted, only weighed. Select the "This artifact cannot be counted" radio button on the Main Tab to disable the Count field.

Catalog as follows:

**Category:** "Organic"  
**Form:** "Charcoal"  
**Completeness:** "Incomplete"  
**Material:** "Charcoal"  
**Manu Tech:** "Indeterminate"  
**Burned?:** "No" (Condition tab)

### 8.5.4. CINDER

Cinder is a product of distilling coal by heating it in an environment that lacks oxygen. Cinder retains coal's angular shape and "platey" appearance, but it is much lighter in weight than coal and its surfaces appear matte and rough rather than shiny. It is gray to black and has surfaces characterized by many tiny air pockets. Even though cinder is a waste product from a burning process, do not catalog it as slag or scrap/waste. Cinder can be batched and weighed together.

Use the following protocols for cataloging cinder:

**Category:** "Organic"  
**Form:** "Cinder"  
**Completeness:** "Incomplete"  
**Material:** "Unidentifiable"  
**Manu Tech:** "Indeterminate"  
**Burned?:** "No" (Condition tab)

#### 8.5.5. COAL

Coal is a naturally occurring sedimentary rock composed primarily of carbon. Due to its high combustibility, coal is used as a fuel source for heating, in forges, and for other industrial processes. Coal can be identified by its shiny, non-porous surfaces, hardness, and high density. There are two main types of coal: bituminous and anthracite. Anthracite has very shiny, angular, “platey” surfaces. It is exceptionally hard. Bituminous coal is also hard but can be more friable. It is also often angular and can have both dull and shiny sections. We do not distinguish between these types in DAACS; they are both cataloged as “Coal.” All coal can be batched and weighed together.

Catalog as follows:

**Category:** “Organic”  
**Form:** “Coal”  
**Completeness:** “Incomplete”  
**Material:** “Coal”  
**Manu Tech:** “Natural”

#### 8.5.6. CORN COB AND CORN KERNEL

These are listed as specific, separate forms: “Corn Cob” and “Seed, corn.” If a corn cob is found with kernels in place, record form as “Corn Cob” and record in the notes that corn kernels are present. Category and Material for both are “Organic,” and Manufacturing Technique is “Natural.”

#### 8.5.7. EGGSHELL

Eggshell should be batched; only count and weight need to be recorded.

**Category:** “Organic”  
**Form:** “Eggshell”  
**Completeness:** “Incomplete”  
**Material:** “Eggshell”  
**Manu Tech:** “Natural”

#### 8.5.8. MUD WASP NEST

Occasionally excavators will come across fragments of mud wasp nests, also called mud dauber nests. Mud wasp nest fragments can be batched; only count and weight need to be recorded.

**Category:** “Organic”  
**Form:** “Mud Wasp Nest”  
**Material:** “Clay”  
**Manu Tech:** “Natural”

### 8.5.9. NUTS

Several specific types of nuts are listed as specific forms in DAACS. If another type of nut can be positively identified, ask the DAACS administrator to add it to the list. Unidentified nutshell fragments should be recorded as “Nutshell, unid.” with material as “Organic.” Nuts of the same type can be batched; only count and weight need to be recorded.

### 8.5.10. PITS

There are two types of fruit pits specifically listed under Form: “Pit, cherry” and “Pit, peach.” If another type of pit can be positively identified, ask the DAACS administrator to add it to the list. Unidentified pits should be cataloged as “Pit, unid.” with material as “Organic.” Pits of the same type can be batched; only count and weight need to be recorded.

### 8.5.11. SEEDS

There are several types of seeds specifically listed under form. If another type of seed can be positively identified, ask the DAACS administrator to add it to the list. Unidentified seeds should be cataloged as “Seed, unidentified” with material as “Organic.” Seeds of the same type can be batched; only count and weight need to be recorded.

### 8.5.12. SHELL

There are several species of shell specifically listed under form. Shell should be batched based on species; only count and weight need to be recorded. Artifacts that have been made from modified shell, such as shell beads and buttons, should be cataloged with the appropriate form in the appropriate module.

<b>Category:</b>	“Organic”
<b>Form:</b>	“Shell, [as appropriate]”
<b>Material:</b>	“Shell”
<b>Manu Tech:</b>	“Natural”

**Mother-of-pearl** is listed under Material, rather than Form. Since a mother-of-pearl fragment might have been part of an inlay or piece of jewelry, the form is often unidentifiable. In this case, Form should be “Unidentified,” rather than “Shell, unidentified.”

### 8.5.13. BLANK, BUTTON

This term applies to material, usually bone, that has been modified to create button blanks (solid bone disks to be covered with fabric) or buttons, as indicated by missing circular “voids” that have been punched out.

Record the modification in the Notes field. For example, “This object is a bone fragment that has been used for making bone buttons. There is evidence for at least one button being punched out.”

Note the term “Blank, button” is also used to refer to the solid bone disks themselves. If you have this type of button blank (solid bone disk to be covered with fabric), enter that into the Button table.

#### 8.5.14. WOOD

This term is used for unburned or partially burned fragments of wood that do not have an obviously identifiable form. Note that fully carbonized wood charcoal should be cataloged with form and material “Charcoal” (see above). Wood can be batched by Manufacturing Technique and Material. Record only count and weight. Catalog as follows:

<b>Category:</b>	“Organic”
<b>Form:</b>	“Wood”
<b>Completeness:</b>	“Incomplete”
<b>Material:</b>	“Wood” or as appropriate.
<b>Manu Tech:</b>	As appropriate, see below.
<b>Burned?:</b>	“Yes” if fragment is partially burned.

Manufacturing Technique for most pieces of wood is “Indeterminate.” For pieces of wood that have saw marks, finished edges, or other such diagnostic attributes, select “Milled.” When a piece of wood has clearly *not* been milled, list the Manufacturing Technique as “Natural.”

The only specific type of wood listed under Material is “Southern Yellow Pine.” If you can positively identify any other type of wood, enter that information into the Notes field. If possible, contact a DAACS administrator to add the new type of wood.

If only a sample of wood was taken during excavation, enter this information into the Notes field.

### 8.6 STONE/MINERAL ARTIFACTS

#### 8.6.1. FERRICRETE/BOG IRON

<b>Category:</b>	“Stone”
<b>Form:</b>	Classify by size category: “Granule (2-4mm)” “Pebble (4-64mm)” “Cobble (64-250mm)” “Boulder (>250mm)”



**Completeness:** "Incomplete"  
**Material:** "Ferricrete/Bog Iron"  
**Manu Tech:** "Natural"

### 8.6.2. MISCELLANEOUS ROCKS

Unmodified pieces of rock that should not be considered artifacts often end up in artifact bags. Project administrators and catalogers should decide whether to discard these stones or catalog them into DAACS. The naturally occurring stones at a site will differ slightly based on geological formation; therefore it is important for the cataloger to have a general understanding of naturally occurring materials as opposed to materials that may have been transported to the site.

**Category:** "Stone"  
**Form:** Each rock should be classified by size. Choose one of the following size categories:  
    "Granule (2-4mm)"  
    "Pebble (4-64mm)"  
    "Cobble (64-250mm)"  
    "Boulder (>250mm)"  
**Completeness:** "Incomplete"  
**Material:** Identify the type of stone, if possible. Unidentified stone should be cataloged as "Stone, unidentified," unless it can be identified as sedimentary, igneous, or metamorphic. In these cases, use the term "Stone, unid sedimentary," "Stone, unid igneous," or "Stone, unid metamorphic."  
**Manu Tech:** "Natural"

Rocks of the same material and that fall under the same size classification can be batched together. The only measurements that need to be taken are count and weight.

Certain stones found at Monticello near the house are known not to appear naturally; however, due to mostly to size, there is limited evidence for architectural use. This includes Alaskite, Limestone, Phylite and Slate. These stones should be cataloged in the same way as above, but with the Manufacturing Technique as "Quarried." If it is unknown if a type of stone occurs naturally at a site, Manufacturing Technique should be "Indeterminate."

Minerals such as mica and lime can also be batched in the same way as stones. The only measurements that need to be taken are count and weight.

Catalog "**Mica**" as follows:

**Category:** "Mineral"  
**Form:** Classify by size category:

“Granule (2-4mm)”  
“Pebble (4-64mm)”  
“Cobble (64-250mm)”  
“Boulder (>250mm)”

**Completeness:** “Incomplete”  
**Material:** “Mica/Micaceous”  
**Manu Tech:** “Natural” or “Indeterminate”

Catalog “Lime” as follows:

**Category:** “Mineral”  
**Form:** Classify by size category:  
“Granule (2-4mm)”  
“Pebble (4-64mm)”  
“Cobble (64-250mm)”  
“Boulder (>250mm)”  
**Completeness:** “Incomplete”  
**Material:** “Lime”  
**Manu Tech:** “Natural” or “Indeterminate”

### 8.6.3. PETRIFIED WOOD

Petrified wood can be batched. The only measurements that need to be taken are count and weight.

**Category:** “Stone”  
**Form:** “Wood, petrified”  
**Completeness:** “Incomplete”  
**Material:** “Wood, petrified”  
**Manu Tech:** “Natural”

### 8.6.4. SLATE

Slate is one of the most commonly used architectural stones. Fragments of slate may be found archaeologically that have no obvious evidence of modification, but which were likely used architecturally. However, when slate also occurs naturally in the area of a site, it may be impossible to determine the provenance of slate fragments. Use the following protocols when cataloging slate.

For slate fragments with no diagnostic evidence of modification where slate occurs naturally at the site:

**Category:** "Stone"  
**Form:** Classify by size category:  
"Granule (2-4mm)"  
"Pebble (4-64mm)"  
"Cobble (64-250mm)"  
"Boulder (>250mm)"  
**Completeness:** "Incomplete"  
**Material:** "Slate"  
**Manu Tech:** "Natural," but indicate in the notes of the fragment could have been architectural.  
**Measurements:** Only record weight.

For slate fragments with no diagnostic evidence of modification where slate *does not* occurs naturally at the site:

**Category:** "Stone"  
**Form:** Classify by size category:  
"Granule (2-4mm)"  
"Pebble (4-64mm)"  
"Cobble (64-250mm)"  
"Boulder (>250mm)"  
**Completeness:** "Incomplete"  
**Material:** "Slate"  
**Manu Tech:** "Quarried"  
**Measurements:** Only record weight.

For slate fragments with obvious evidence of modification, such as finished edges, but which have multiple potential architectural uses:

**Category:** "Stone"  
**Form:** "Architecture, unid."  
**Completeness:** As appropriate, likely "Incomplete"  
**Material:** "Slate"  
**Manu Tech:** "Quarried"  
**Measurements:** Record any complete dimensions in addition to weight.

For slate fragments that have clear evidence of use as roofing tiles, including nail holes:

**Category:** "Stone"  
**Form:** "Tile, roofing"  
**Completeness:** As appropriate  
**Material:** "Slate"  
**Manu Tech:** "Quarried"  
**Measurements:** Record any complete dimensions in addition to weight.

Note that flat pieces of slate can also be writing slate. For flat pieces of slate with evidence of writing or engraving, select form "Slate, writing." Note that writing slate is often darker grey or black and shinier in appearance than architectural slate.

**Category:** "Stone"  
**Form:** "Slate, writing"  
**Completeness:** As appropriate  
**Material:** "Slate"  
**Manu Tech:** "Quarried"  
**Measurements:** Record any complete dimensions in addition to weight.  
**Notes:** Describe the writing or engraving in the notes.

See Section 8.4.5 on how to catalog Slate Pencils.

#### 8.6.5. ST. BEE'S SANDSTONE

St. Bee's sandstone is a specific type of red sandstone used for architectural construction.

**Category:** "Stone"  
**Form:** "Architectural, unid."  
**Completeness:** "Incomplete"  
**Material:** "Sandstone, red, St. Bees"  
**Manu Tech:** "Quarried"  
**Notes:** Record that the stone(s) is/are "St. Bee's sandstone from Cumbria, England."

Catalog a fragment individually and record thickness if the "top" and "bottom" surfaces are intact. Fragments can be batched and weighed if only one or no original surfaces are present.

#### 8.6.6. RED SANDSTONE

This term applies to any red sandstone that cannot be identified specifically as St. Bee's, or that is known not to be St. Bee's. This encompasses all reddish-purple sandstones that were used for many architectural purposes.

**Category:** "Stone"  
**Form:** "Architectural, unid."  
**Completeness:** "Incomplete"  
**Material:** "Sandstone, red, unid."  
**Manu Tech:** "Quarried"

### 8.6.7. BLUESTONE

This is a broad term that encompasses all blue-gray sandstones that were used for many architectural purposes. For example, at Drayton Hall in South Carolina, the Curator of Historic Architectural Resources believes that the bluestone was used in construction of the house basement.

**Category:** "Stone"  
**Form:** "Architectural, unid."  
**Completeness:** "Incomplete"  
**Material:** "Bluestone"  
**Manu Tech:** "Quarried"

### 8.6.8. TUFF, DIFFERENTIALLY CRYSTALLIZED

This term applies to a specific type of stone from the vicinity of Asheboro, North Carolina that was formed when ash deposits became silicified. The materials in this deposit vary in color and quality. It is also sometimes called Welded Vitric Tuff, which occurs within the same formation in a variety of colors such as: green, brown, and blue or dark blue. This DCT variety is differentially crystallized, which when weathered produces a distinctive speckled appearance as small pockets chemically break down and sometimes erode faster than the surrounding matrix. When freshly broken, the material appears dark blue or grey and weathers to a lighter grey with the small pockets appearing as white speckles. This tuff has been used as an architectural material.

**Category:** "Stone"  
**Form:** "Architectural, unid."  
**Completeness:** "Incomplete"  
**Material:** "Tuff, Differentially Crystallized"  
**Manu Tech:** "Quarried"

## 8.7. FLOTATION SAMPLES (MICRO-ARTIFACTS)

Artifacts identified during picking should be cataloged according to the appropriate material type and form and **should be batched**. The only measurements that need to be taken are count and weight. Only pieces larger than 4 mm should be *counted* for the batched record; for those smaller than 4 mm, select the "This artifact cannot be counted" radio button on the Main tab. However, all artifacts should be *weighed* for the batched record.