



DAACS Cataloging Manual: General Artifacts

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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, 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, Elizabeth Sawyer, 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. They have been substantially revised by Cooper, Galle, and Bates in the intervening years.

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INTRODUCTION

The **General Artifacts** table in DAACS provides a catch-all cataloging schema for those artifacts not included in the Bead, Buckles, Button, Ceramic, Faunal, Glass Vessel, Tobacco Pipe, and Utensil Tables.

Nails, bricks, and lithics, for example, should all be cataloged as General Artifacts. Note that some material types overlap between the **General Artifacts** table and the other main artifact tables. For instance, window glass should always be entered into the General Artifacts Table. Even though there is a **Glass Vessel** table, it is intended only for vessels such as tablewares and bottles. Likewise, ceramics such as floor and roofing tiles, porcelain dolls, and ceramic doorknobs should be entered into the **General Artifacts** table, while ceramic vessels such as plates or mugs should be entered into the **Ceramics** table.

Another possible point of confusion is the relationship between the **General Artifacts** table and the **Faunal** table. Ecofacts such as shell and eggshell are cataloged into the General Artifacts table. Mammal, fish, and reptile bones are cataloged into the Faunal Table.

This section begins with a discussion of the fields in the main **General Artifacts** table followed by a list of cataloging protocols for common general artifacts (**Section 7**). Note that each general artifact is cataloged as one of the following materials: 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.

1. GENERAL ARTIFACT ENTRY

Below are descriptions and cataloging rules for the various fields in the general artifacts table.

1.01 ARTIFACT COUNT

Generally refers to the number of individual objects being cataloged in an entry. Note that for some artifact types the count does not always include every single small artifact fragment in the batch. See batching rules for particular artifact types in **Section 7**, below.

1.02 CATEGORY

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

1.03 GENERAL ARTIFACT FORM

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). Many artifacts will have Unidentified forms. Please see specific artifact sections for more detail on Form.

1.04 COMPLETENESS

For most artifacts, choose “Complete,” “Incomplete,” or “Unidentifiable.” Nails, Spikes, and Straight Pins have different cataloging protocols for the Completeness field. See those particular sections for specific cataloging instructions.

Note: In addition, we have “Blade” and “Handle” as completeness options. Use these options if you have the blade or handle 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.”

1.05 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; however, all artifacts should be *weighed* for the batched record.

1.06 MENDED?

The default for this field is “No”. If the artifact is mended to another artifact, enter “Yes” in this field. Put the Artifact ID of the artifact (or artifacts) to which it is mended in the Notes field.

1.07 DECORATED?

Only record here whether the artifact has decoration or not. Choose “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 3**).

1.08 COIN DATE

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

1.09 MATERIAL AND MANUFACTURING TECHNIQUE

The material and manufacturing technique fields are recorded in a separate, related data table that allows us 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:

Indeterminate is recorded as the manufacturing technique for the following Forms:

- Form “Charcoal” (Material = “Organic”)
- Form “Window Glass” (Material = “Glass”)
- Form “Cinder” (Material = “Unidentified”)
- Form “Fire-Cracked Rock” (Material = As appropriate)
- Form “Shatter” (Material = As appropriate)

In general, 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 the source of the modification cannot be determined between natural and human modification. See specific protocols for artifacts below (**Section 7**). Also, see section 7.2.11 for specific uses of manufacturing technique terms regarding nails.

1.10 NOTES

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

2. GENERAL ARTIFACT MEASUREMENTS

2.1 OBJECT LENGTH, WIDTH, HEIGHT, AND WEIGHT

For most 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.

Nails and several other artifact forms have separate measurement protocols. See Section 7 for details regarding these protocols.

If General Artifact Form is “Unidentified,” record the artifact’s length, width and height even if the measurements are incomplete.

Weight should be taken for all artifacts. See batching rules for specific artifact types, including charcoal, modern artifacts, and window glass, in Section 7.

2.2 OBJECT DIAMETER

This measurement applies only to straight pin and needle shanks, marbles, shot, and other circular or round general artifacts. It does not apply to nails, screws, bolts, or other hardware.

Measure the diameter of a pin or needle shank as close to the middle of the shank as possible. Record the widest diameter of a marble or shot, with the calipers and enter the value in Object Diameter. In this case, do not use the Height field for the diameter measurement.

2.3 BRICK SIZE*

*This field is only used by the Monticello Archaeology Department; this information is not recorded for any DAACS site.

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.

We use a total of four-size classes (2-1/2", 1-1/4", 5/8", and 1/4") to sort brick, brick frags, and brick/daub by size. Brick caught in the 2-1/2 " screen is cataloged as that size; brick caught in the 1-1/4 " screen is cataloged as that size, and so on. 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.

3. GENERAL ARTIFACTS DECORATION

3.1 MARKS

Record any marks observed on the artifact, even if individual letters or numbers are not discernible.

3.2 DECORATION

Identify and record any decoration applied to the artifact.

If applied color is part of the decoration, identify each color using the **Basic Colors** section of the DAACS Color Book, and enter that information into the Applied Color field. Keep in mind that these represent ranges of color, not exact matches. In addition,

the colors “Copper,” “Silver/Tin,” “Bronze,” and “Gold” may be used to identify decoration color.

Note: If the decorative technique has no applied color, enter “No Applied Color” in this field. Do not use “Not Applicable.”

Be sure to add any additional observations to the Decoration Notes field.

4. GENERAL ARTIFACTS CONDITION

4.1 BURNED?

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

4.2 POST-MANUFACTURING MODIFICATION

Use this field when an artifact appears to have been physically modified in order to change its original function. Examples include knapped bottle glass, drilled coin made into a pendant. Other examples include hand-etched window glass and repair marks.

Catalog the object as it would be cataloged in its original form. For example, if you have a drilled Spanish Real, catalog it as “Coin, Spanish” for Form with the Manufacturing Technique as “Stamped.” Enter “Yes” under Post-Manufacturing Modification and describe in the Notes that the coin has been drilled. Do not catalog the coin as “Pendant” for Form or “Drilled” for Manufacturing Technique. However, objects made from organic materials such as bone or shell should be entered as their current form, without post-manufacturing modification.

4.3 CONSERVATION?

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.

5. IMAGE

Please see manual on Image capture and entry into the database. Add some common language about when to image.

6. OBJECT

Please see manual on Object entry into the database.

7. CATALOGING PROTOCOLS FOR COMMON GENERAL ARTIFACTS

7.1 GLASS ARTIFACTS

Glass vessels, such as bottles, tablewares, jars, etc., should be cataloged into the Glass Vessel Table. Other objects made of glass (excluding beads, which are in the Bead Table) such as window glass and paste jewels are entered into the General Artifacts Table.

7.1.1 LAMP CHIMNEY

Lamp Chimney is a glass tube that surrounds the flame on an oil lamp. It is used to control air drafts. It can be identified by its cylindrical shape and by its relative thinness.

Catalog as follows:

Category:	“Glass”
Form:	“Lamp Chimney”
Material:	“Glass”
Manu Tech:	Almost always “Blown.” If you have seam lines or other visible evidence of molding, record Manufacturing Technique as “Molded.”

7.1.2 WINDOW GLASS AND VARIOUS TYPES OF FLAT GLASS

Flat glass is batched according to Form, except for plate glass, which should be further subdivided by 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 2.6mm thick.
2. **Matteness:** Any sherd thicker than 2.6mm 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 “Clear to Light Green,” as identified on the **Basic Color** section of the DAACS Color Book.

Use the following protocols when cataloging plate glass:

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 incising/writing. 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'." (Colonial Williamsburg Standard Operating Manual).

“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, catalog flat glass as follows:

Category: "Glass"
Form: "Window Glass"
Material: "Glass"
Manu Tech: "Indeterminate"

Batching: All window glass can be batched by type regardless of color or decomposition, unless the sherds have distinctive characteristics such as finished edges or incising/writing. If you have hand-incising or writing, catalog separately and list as Post-Manufacturing Modification. 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.

7.2 METAL ARTIFACTS

7.2.01 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.

7.2.02 COINS

- Category:** "Metal"
One of the following **Forms:**
"Coin, American"
"Coin, Danish"
"Coin, Dutch"
"Coin, English"
"Coin, Irish"
"Coin, Jamaican"
"Coin, Spanish"
"Coin, unid"
"Coin, Virginia"
Completeness: As Appropriate
Material: As Appropriate
Manu Tech: "Stamped"

Describe the coin as thoroughly as possible in the Notes field. Include date, denomination, any designs seen on the coin, etc.

7.2.03 CORROSION/RUST

Often, one will be faced with cataloging unidentifiable lumps of rust with no discernible iron left intact. Form should be "Corrosion/Rust," with the manufacturing technique as "Indeterminate." Material should still be "Iron." The only measurement that needs to be taken is weight.

Batching: Due to the high fragmentation of iron artifacts, "Corrosion/Rust" should not be counted. A count of "0" should be entered in the count field. Although using "0" is not ideal, it provides a clear sign that the number of pieces in the batch have not been counted.

A common form of corrosion is the spalling of large sheets of rust from the surface of flat iron 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 iron artifact while in the process of being cataloged, batch the corrosion and the original artifact together and note what has happened.

7.2.04 ESCUTCHEON AND KEYHOLE COVERS

Escutcheons are decorative metal accents, usually copper alloy, that surround a keyhole and are often used on furniture or 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 which case it will be cataloged as an escutcheon.

7.2.05 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, Machine Made.

Batching: Grommets of similar size can be batched. The only measurements that need to be taken are count and weight.

7.2.06 HARDWARE

Hardware encompasses items generally made of metal - that serve to hold together or provide a means of grasping multi-component items such as furniture or cabinetry (e.g. screws, hinges, handles, brackets, etc.). Hardware is part of a finished product.

“Hardware, unidentified” is a form category for those items that seem to be hardware, but cannot be identified to exact form. “Hardware, electrical”, “Hardware, vehicle”, and “Furniture Hardware” are additional, more specific, choices.

For Form “Screw,” Completeness should reflect the parts of the screw including Head, Shank, Tip, and Complete. You can batch screws of the same completeness together. Unlike nails, the only measurement you need to record is Count and Weight.

7.2.07 HORSE FURNITURE

Occasionally, one finds hardware associated with horses that cannot be classified as Buckles, Horseshoes, or any other specifically defined category. These artifacts should be cataloged as Horse Furniture. For example, the strap retainer pictured below is listed as Horse Furniture:



Note: The term Horse Furniture does not include carriage parts.

7.2.08 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.

7.2.09 LEAD SHOT

Starting around 1782, shot was made by dropping molten lead from the top of a shot tower. Lead shot 6 mm or less in diameter and smooth (no cast lines) should be cataloged as “Shot, Bird” and can be batched. Only record count and weight. Note that Manufacturing Technique is “Dropped.”

- **“Shot, Bird”**
 - Category:** “Metal”
 - Form:** “Shot, bird”
 - Completeness:** “Complete”
 - Material:** “Lead”
 - Manu Tech:** “Dropped”

Shot larger than 6 mm could have been either dropped or cast and should be cataloged separately as “Shot Round” with the appropriate Manufacturing Technique recorded. Record Weight and Diameter.

- **“Shot, Round”**
 - Category:** “Metal”
 - Form:** “Shot, round”
 - Completeness:** “Complete”
 - Material:** “Lead”
 - Manu Tech:** “Cast”

7.2.10 BULLETS

If only the projectile (live portion):

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

Modern bullets should just 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.

Bullet can also refer to just the casing and/or the projectile, if both are intact. Catalog a projectile as follows:

Category: "Metal"
Form: "Bullet"
Completeness: "Complete"
Material: "Lead" or "Lead Alloy"
Manufacturing Technique: "Machine Made"

Catalog a casing as follows:

Category: "Metal"
Form: "Bullet casing"
Completeness: "Complete"
Material: "Copper Alloy"
Manufacturing Technique: "Machine Made"

7.2.11 NAILS/SPIKE

Complete nails and incomplete nails have separate cataloging protocols. A Nail that is larger than 120mm is cataloged as a Spike. The Nail Information tab must be filled out for all nails and spikes, whether batched or individual. The only exception is wire nails. See note on wire nails below. For ease of batching, we recommend sorting first by complete versus incomplete nails, and then by manufacturing technique, head and end types.

Complete Wrought and Machine Cut Nails and Spikes

For complete nails: Enter Nail Head type, Nail End type, Nail Modification and Nail Length. You will also record the weight of the individual nail or batch. Guidelines for identifying Head Type, End Type, and Nail Modifications are provided below starting on page 21.

Please note that new batching rules for complete nails were implemented on October 28, 2010. Prior to implementation, all complete nails were cataloged individually. Complete nails should be batched according to length (rounding to the nearest 5 mm),

manufacturing technique, material, burning, nail head type, nail end type, and nail modification. You can batch complete nails that share the same characteristics.

For example, if you have 10 complete wrought nails with roseheads, shovel (spatulate) tips, and without modification, you would catalog the nails as a single record as follows:

Artifact Count: 10
Category: "Metal"
Form: "Nail"
Completeness: "Complete"
Burned?: "No"
Material: "Iron"
Manu Tech: "Wrought/Forged"
Measurements Tab: The only field that needs to be filled out is weight. Record weight of batch in grams.
Nail Information Tab >
Nail Head Type: "Rosehead"
Nail End Type: "Chisel/Shovel"
Nail Modification: "None"
Nail Length: Measure the length of the nail using the ruler on the cataloging mat. Round to the nearest 5 mm. Measure a **bent** or otherwise **modified** nail, by rolling them on the table mat scale or use a flexible tape to measure their actual lengths.
Weight: Record weight of the batch in grams.

Incomplete Wrought and Machine Cut Nails and Spikes

Batch incomplete nails that have the same head, shank, and/or tip type.

There can be any number of batchable combinations. For example, head and partial shank nails with a rosehead and wrought shank should be batched together. Tip and partial shank nails with a blunt tip and cut body should be batched together. Note that we do not identify nail modifications for incomplete nails. Enter "Not Recorded" in the Nail Modification field. You can batch incomplete nails of any modification together as long as the head, shank, and/or tip types match.

Artifact Count: Enter the number of batched incomplete nails.
Form: "Nail"
Completeness: There are several options in this field specifically for incomplete nails. They are: "Head," "Head and Partial Shank," "Shank," "Tip," and "Tip and Partial Shank." Choose one of these options for each incomplete nail or batch of incomplete nails. Never enter "Incomplete."

- Burned?:** You can batch burned and unburned nails together. If a batch does include burned nails, enter “N/R” (Not Recorded) into the Burned? field.
- Material:** Almost always Iron.
- Manu Tech:** Identify as “Wrought/Forged,” “Machine Cut,” or “Drawn/Wire.” If you cannot determine whether the nail is wrought or machine cut, record manufacturing technique as “Not a Wire Nail.” If, for example, the nail is so corroded that you are unable to determine the manufacturing technique at all, record it as “Unidentifiable.”
- Measurements Tab:** The only field that needs to be filled out is weight. Weigh batched nails together.
- Nail Information Tab:** Identify Nail Head Type, Nail End Type.

We do not record Nail Modifications for incomplete nails. If none of the nails are modified, enter “None.” If one or more is bent, pulled or clinched, enter “Not Recorded.”

Complete and Incomplete Wire Nails and Spikes

All wire nails are batched, regardless of completeness, nail type, and nail modification. This protocol was established on October 28, 2010. Prior to this date, all wire nails were cataloged individually if complete and batched if incomplete. A majority of wire nails have “Machine Round” heads and “Point” ends.

If you have 25 wire nails, and 10 are complete and 15 are incomplete, catalog them as follows:

- Artifact Count:** 25
- Form:** “Nail”
- Completeness:** “Not Recorded”
- Burned?:** “N/R” (Not Recorded)
- Material:** “Iron”
- Manu Tech:** “Drawn/Wire”
- Measurements Tab:** The only field that needs to be filled out is weight. Weigh batched nails together.
- Nail Information Tab:** Change Nail Head Type, Nail End Type and Nail Modifications to “Not Recorded.”

Reproduction Nails and Spikes

Similar to original nails, all complete reproduction nails should be batched according to manufacturing technique, material, burning, nail head type, and nail end type. You can batch complete nails that share these same characteristics as well as being the same length (rounding to the nearest 5mm) and the same nail modification. The appropriate

manufacturing technique should be recorded for the reproduction nail (i.e. machine cut or wrought).

For example, if you have 5 complete wrought reproduction nails with roseheads, shovel (spatulate) tips, and without modification, you would catalog the nails as a single record as follows:

Artifact Count: 5
Form: "Nail, reproduction"
Completeness: "Complete"
Burned?: "No"
Material: "Iron"
Manu Tech: "Wrought "
Measurements Tab: The only field that needs to be filled out is weight. Weigh batched nails together.

Nail Information Tab >

Nail Head Type: "Rosehead"
Nail End Type: "Chisel/Shovel"
Nail Modification: "None"
Nail Length: Measure the length of the nail using the ruler on the cataloging mat. Round to the nearest 5 mm. Measure a **bent** or otherwise **modified** nail, by rolling them on the table mat scale or use a flexible tape to measure their actual lengths.

Notes on Head Type

For wrought nails, a "Rosehead" nail head should be identified if one sees the apex and at least three strikes. Otherwise, the head should be identified as "Wrought, unid." There are other nailhead types (i.e. double strike, peaked); however, these are subsumed within "Wrought, unid."

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

Notes on Nail Modification

Use the following definitions to identify any 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": Straight



Notes on Tip Type

“Blunt”

The standard nail tip seen on machine cut nails; tip is straight across



“Chisel/Shovel”

Tip is “flared out.” Also known as a “spatulate tip.” Seen on wrought nails.



“Point”

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



Rounded

Tip is smoothly rounded.



7.2.12 NAIL WASTER

“Nail, waster” refers to nails that were flawed 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 like regular nails except for two fields, General Artifact Form and Nail Head Type.

Form: This should be entered as “Nail, waster” for both anvil and hardy wasters. The distinction between the two flaw types occurs in the Nail Information Tab.

Nail Head Type: 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.

See following page for images.



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 hammered but not 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.

7.2.13 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 as “Nail Rod Binder.”

7.2.14 POTS

Cast iron pot fragments should be cataloged as follows:

Category: "Metal"
Form: "Pot"
Completeness: "Incomplete"
Material: "Iron"
Manu Tech: "Cast"

7.2.15 SHEETING

Very thin, flat pieces of iron 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 according to material type. The only measurements that need to be taken are count and weight.

7.2.16 STRAIGHT PINS

Straight pins (Form "Pin, Straight") have a fairly complicated set of cataloging protocols. For Completeness, use the same entries as one would for nails (i.e. Head and Partial Shank, Tip and Partial Shank, Shank, etc.). Complete straight pins should be cataloged individually. Head and Partial Shank straight pins, or tip and partial shank, can be batched together if the material and manufacturing technique are the same.

Most are either "Copper Alloy," or "Tinned Copper Alloy," although some iron pins have been found. For Manufacturing Technique, all are "Drawn/Wire."

Determine whether the head has been hand-made or stamped. This may require looking under a microscope. 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.

Take the following measurements for complete straight pins (length should be measured using calipers, not the ruler on the cataloguing mat):

Length: Length of the pin.
Width: Do not record.
Height: Do not record.
Weight: Weight of the pin.

Diameter (if applicable, mm): Thickness of the pin shaft. Be sure to measure the diameter of a pin shank as close to the middle of the shank as possible.

7.2.17 STRAPPING AND HOOP IRON

Iron strapping is thin, flat, and rectangular.

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.” Strapping can be distinguished from “Sheet Metal” in a few ways, the most obvious being its rectangular shape. The two longer edges on strapping are also usually finished. Some strapping is “Wrought/Forged.” This strapping is slightly thicker than rolled/sheet strapping, and is slightly more irregular in shape and thickness.

Iron strapping can be batched based on 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” is a specific use for iron strapping. Strapping should be cataloged as such in the Form field if it meets one or both of the following two criteria:

1. The fragment of strapping has a definite barrel-sized curve. This can usually only be seen on longer pieces of strapping.
 2. The fragment of strapping includes the two ends that are riveted together.
- Barrel Hoop is also thicker and wider than most other iron strapping.

“Bucket Hoop” is generally the same as barrel hoop, only thinner and with a bucket-sized curve.

7.2.18 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, but cannot be identified to exact form. “Tool, fireplace” consists of tools arrayed around a fireplace; poker, tongs, etc. “Tool, other” is used for otherwise unidentified stone tools as well as identified tools too uncommon to justify a specific form, such as a tire iron.

Note: Keep in mind that “Handle” is a Completeness options. 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.

7.2.19 TACK, UNIDENTIFIED

DAACS distinguishes upholstery tacks by the presence of a cast copper alloy head. If there is no cast copper alloy head, or the head is wrought iron, record the tack as “Tack, Unidentified.” Complete unidentified tacks and incomplete 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:

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 according to completeness (heads and partial shanks, tip and partial shanks, and shanks). Record the count and weight only for both individual and batched incomplete tacks. No other information needs to be recorded.

7.2.20 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 ones with wrought heads were used for a variety of other purposes. Record the Completeness for these as either “Complete” or “Incomplete.”

Complete Tacks:

Complete tacks should not be batched.

Record the Manufacturing Technique as “Wrought” for complete tacks; however, when recording an upholstery tack head only, Manufacturing Technique should be recorded as “Cast.”

Incomplete Tacks:

Incomplete upholstery tacks can be batched. Record Count and Weight. Manufacturing technique for shanks (recorded as “Incomplete”) should be “Wrought.” Tack heads should be recorded as “Cast.”

7.2.21 HOOK, CLOTHING

Record Manufacturing Technique as “Drawn/Wire.” Record Length, Width, Height, and Weight accordingly.

7.2.22 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 this case, list the Form as “Unidentified,” the Completeness as “Incomplete,” and describe the artifact in the notes. Unidentified iron fragments that measure less than 20mm 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 10mm do not need to be cataloged and can be discarded. Fragments greater than 20mm need to be cataloged separately and all measurements need to be taken.

Manufacturing technique is often difficult to determine for unidentified iron fragments. 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.”

7.2.23 WIRE

Unidentified fragments of wire should be cataloged under 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 should 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.

7.3 MISCELLANEOUS ARTIFACTS

7.3.1 BRICK, DAUB, AND CHINKING

All bricks get the Category of “Ceramic.” There are many specific brick Forms but follow these guidelines for most general brick:

Count: The total number in the batch
Category: "Ceramic" (Use this for all Brick, Daub, and Chinking)
Form: See specific Form descriptions below
Completeness: "Complete" or "Incomplete"
Material: Either "Brick", "Brick/Daub", "Daub" or "Chinking"
Manu Tech: Either "Hand-made" or "Machine Made"

The following are the five most common brick-related Forms:

- "Brick/Daub Fragment":** Most commonly used Form when cataloging brick materials. Use when you have brick fragments or daub/chinking fragments that do not meet the other criteria; for example, bricks that do not have an original side, or possible daub fragments which have no discernible evidence of lathe or twig impressions.

Category: "Ceramic"
Form: "Brick/Daub"
Material: "Brick/Daub"
Manu Tech: "Hand-made"

Brick/Daub is weighed and batched. No other measurements need to be taken.

- "Brick Bat":** Use when the brick has two or more complete/original measurable dimensions. These original dimensions should be recorded in the Measurements Tab. For incomplete Length, Width, or Height measurements, leave those fields blank. Always record Weight. The default Material is "Brick, red", although other colors exist and should be chosen as appropriate. Do not batch.

Category: "Ceramic"
Form: "Brick Bat"
Material: "Brick, red" (or other color, as appropriate)
Manu Tech: Either "Hand-made" or "Machine Made"

- "Brick Fragment":** Use when the brick has part of at least one original side. The default material is Brick, red, although other colors exist and should be chosen as appropriate. Do not batch those bricks that have one complete measurable dimension. Take the measurement and record in the appropriate field. Those fragments that do not have an original complete measurable side can be weighed and batched according to material. No other measurements need to be taken for batched brick.

Category: "Ceramic"
Form: "Brick Fragment"
Material: "Brick, red" (or other color, as appropriate)
Manu Tech: Either "Hand-made" or "Machine Made"

Manufacturing Technique will frequently 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. Manufacturing Technique for modern, machine-made bricks should be “Machine Made.”

- **Daub:** Clay/Brick-like material that has twig or lathe impressions. Occasionally one will have a tremendous amount of daub from one context, including some fragments without twig or lathe impressions that are still clearly daub. Go ahead and catalog these fragments as daub, even if they do not all have impressions. See below for batching rules.

Category: “Ceramic”

Form: “Daub”

Material: “Daub”

Manu Tech: “Hand-made”

- **Chinking:** Clay/Brick-like materials that have 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. See below for batching rules.

Category: “Ceramic”

Form: “Chinking”

Material: “Chinking”

Manu Tech: “Hand-made”

Batching Rules for Daub and Chinking:

First, divide the fragments into groups based on the number of sides each has with log impressions.

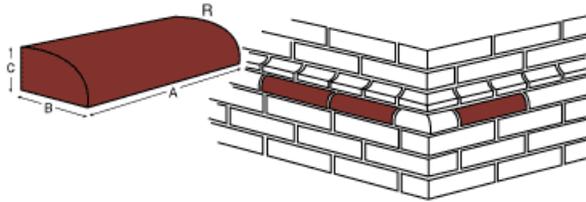
For each group, batch all chinking fragments 60mm and smaller, recording only count and weight. Indicate in the Notes the number of sides with log impressions.

All chinking fragments 65mm and larger are cataloged separately, 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 specific 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.

- **“Brick, bullnose”**



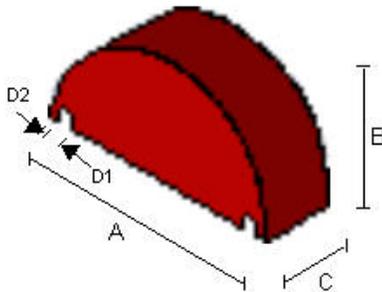
- **“Brick, column 1”**
(Pie-slice or wedge-shaped brick)



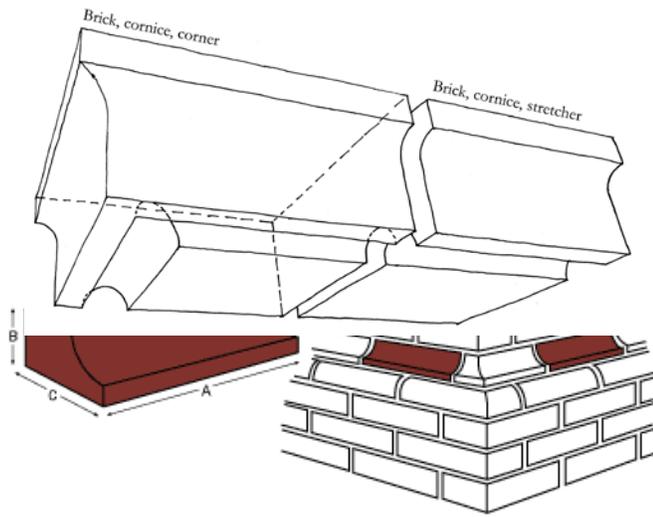
- **“Brick, column 2”**
(Brick with one curved long edge, one straight long edge)



- **“Brick, coping”**



- **“Brick, cornice”**



- **“Brick, water table”**

- **“Brick, specialty unid.”:** Use this term when you cannot determine the exact type of specialty brick form.

For bricks, Category will usually be “Ceramic.” If there is mortar still attached to the brick, list Category as Composite, and then record both brick and mortar in the Material field.

Manufacturing Technique will frequently 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. Manufacturing Technique for modern, machine-made bricks should be “Machine Made.”

When batching brick fragments, catalog burned and unburned fragments separately. Glazed brick should also be cataloged separately by Form. Note that the fragments are “glazed” in the Notes field. See also “Mortar” (Section 7.3.3).

7.3.2 GASTROLITHS

A piece of small, heavily eroded stones is a gastrolith, also called stomach stone or gizzard stone. These 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.

7.3.3 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"

- **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"

- **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.)

Take the following measurements for complete marbles:

Length: Do not record.
Width: Do not record.
Height: Do not record.
Weight: Weight of the marble.
Diameter: Diameter of marble (mm).

7.3.4 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”
Post-Manufacturing Modification:	“N/R”

Fragments of modern “**Road Paving**” should be catalogued as follows:

Category:	“Composite”
Form:	“Road Paving”
Material:	“Asphalt”
Manu Tech:	“Machine Made”

Road paving can be batched. The only measurement that needs to be taken is weight.

Due to the high fragmentation of tar paper, it should not be counted, only weighed. A count of “0” should be entered in the count field. Although using “0” is not ideal, it provides a clear sign that the number of pieces in the batch have not been counted.

Fragments of modern “**Tar Paper**” should be catalogued as follows:

Count:	0
Category:	“Synthetic”
Form:	“Tar Paper”
Material:	“Tar”
Manu Tech:	“Machine Made”

7.3.5 MORTAR, PLASTER, CEMENT AND CONCRETE

While similar in composition, these four artifact types are different in their use and composition and should be cataloged accordingly. Plaster is spread on walls and ceilings forming a hard surface when dried and can have smooth surfaces and lath impressions. This differs from chinking in that plaster is tan to white in color, friable, and a more refined paste. For more on Chinking, please refer to section 7.3.1 of this manual.

Plaster is spread on walls and ceilings forming a hard surface when dried. There are three types of plaster: scratch coat, brown coat and finishing coat. Scratch coat plaster is a fairly thick layer applied to a brick and mortared wall or lath work. It is tan to brown in color, moderately friable, and tempered with fine grit. Monticello examples have very small clear quartz inclusions, and can include horsehair. Brown coat plaster is a denser, secondary application applied to the scratch coat resulting in a smoother surface upon which a finishing coat plaster or whitewash is applied. Brown coat plaster is tan to brown in color, normally tempered with fine grit, occasionally including small lime inclusions and can be as hard as cement. Without the lath impressions or a smoothed side, rough-coat plaster appears practically indistinguishable from mortar in its composition. Finishing coat is a thin layer of fine, lime-tempered plaster applied to brown coat plaster. It is often white and chalky in appearance.

Mortar tends to be very friable and its composition includes a considerable amount of lime.

Cement is denser, grittier and has more variable inclusions, while Concrete is cement with large inclusions. Concrete is not listed as a separate form, rather the form should be cataloged as “Cement, unidentified.”

Mortar and plaster should always be cataloged as following:

Count: Record Count
Category: “Composite”
Form: “Mortar”
Completeness: “Incomplete”
Material: “Mortar”
Manu Tech: “Hand-made”

Category: “Composite”
Form: “Plaster”
Completeness: “Incomplete”
Material: “Plaster”
Manu Tech: “Hand-made”

If the fragment has evidence of lath impression and/or has a smoothed, finished side, it should be cataloged as Plaster. If it does not have either, it should be cataloged as Mortar. In the Notes, please record if any of the following attributes:

- A finished surface (i.e. wall impressions);
- Lathe impressions;
- Whether the mortar is comprised mainly of lime or shell

If there are any brick fragments, plaster fragments, etc. still attached to the mortar, add these as separate entries in the General Artifact Material table, with the appropriate manufacturing technique. In these cases, the majority of an artifact should influence the attribution of Form in the General Artifacts table, i.e. if mortar has fragment of brick then Form is "Mortar," if brick fragment retains mortar, then Form is "Brick, fragment."

For example, if a piece of mortar has brick fragments attached it would be cataloged as follows:

Quantity: Record Count
Category: "Composite"
Form: "Mortar"
Completeness: "Incomplete"
Material: "Mortar"
Manu Tech: "Hand-made"

Material: "Mortar" ManuTech: "Hand-made" AND

Material: "Brick, fragment" ManuTech: As appropriate

If mortar is whitewashed – add this as an additional material, and record the manufacturing technique as "Hand-made."

Batching: Mortar and plaster types fragments can be batched by form (i.e. all Mortar can be batched; all plaster can be batched). The only measurements that need to be taken for mortar are Count and Weight. If the mortar or plaster fragments have diagnostic attributes, such as unusual shapes, log impressions, etc., then they should be batched together according to these attributes. Be sure to record the attribute in the Notes section.

Do not use the Form or Material type "Plaster/ Mortar."

Cement should always be cataloged as following:

Quantity: Record Count
Category: "Composite"
Form: "Cement, unidentified"
Completeness: "Incomplete"
Material: "Cement/Concrete" or "Cement, possible TJ"
Manu Tech: "Indeterminate"

Portland cement should be cataloged as following:

Quantity: Record Count
Category: "Composite"
Form: "Cement, portland"
Completeness: "Incomplete"

Material: "Cement/Concrete"
Manu Tech: "Machine Made"

Concrete should be cataloged as following:

Quantity: Record Count
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.

7.3.6 MUSICAL INSTRUMENTS

There are several types of musical instruments listed in DAACS, including Harmonicas, Accordions, and Jew's 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.

Jew's Harps, also known as Jaw Harps and Mouth 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. Enter into 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.

7.3.7 PENCILS

Catalog slate pencils as follows:

Material: "Stone"
Form: "Pencil, slate"
Completeness: "Incomplete"
Material: "Slate"
Manu Tech: "Carved"

Indicate any use wear in the Notes.

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

Material: "Mineral"
Form: "Pencil, lead"

Completeness: "Incomplete"
Material: "Graphite"
Manu Tech: "Machine Made"

7.3.8 SCRAP/WASTE

Scrap/Waste should be used to define any scrap or waste from a manufacturing process. This could include scrap sheet iron with shear marks on it, casting waste, forging waste, or remnants of bone from the production of a bone tool.

If the manufacturing process in question is casting, then choose "Casting Waste" as the Form, otherwise choose "Scrap/Waste." Casting waste, or sprue, is often seen in the form of either little drops or irregular, elongated lumps. It is almost always lead, although pewter casting waste has been found. If the "Scrap/Waste" is identified as lead, the manufacturing technique should be cast.

Scrap or waste can be batched. The only measurement that needs to be taken is weight.

7.3.9 SLAG

Slag should always be cataloged as follows:

Category: "Composite"
Form: "Slag"
Completeness: "Incomplete"
Material: "Unidentified"
Manu Tech: "Indeterminate"

If you are 100% positive that a piece of slag is iron or coal related, record this in the notes (not in the Material table). Almost all slag, however, should be considered unidentified.

Slag is always batched. The only measurement that needs to be taken is weight.

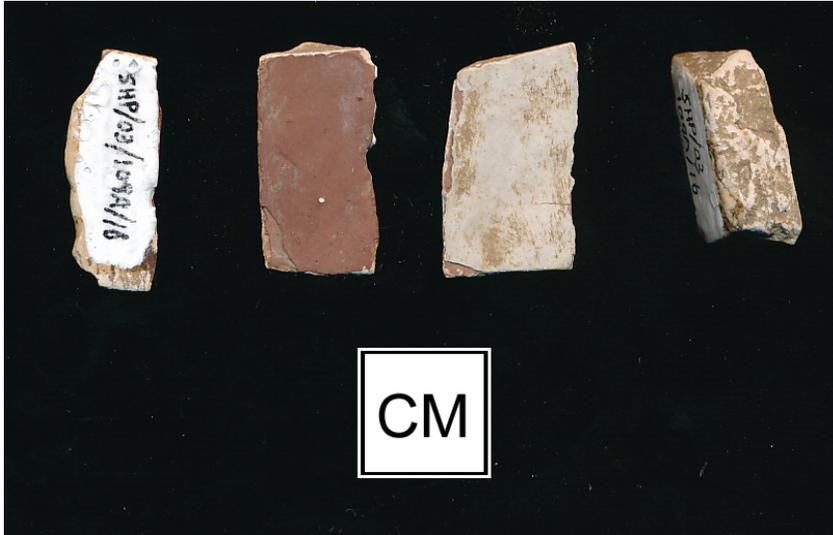
Cinder and Casting Waste should be cataloged as such and not as types of slag.

7.3.10 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:

Category: "Composite"

Form: "Window Glazing"
Completeness: "Incomplete"
Material: "Window/glazing putty"
Manu Tech: "Indeterminate"



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

7.4 ORGANIC ARTIFACTS

Category: Organic

Completely unidentifiable organic material should be cataloged under Form as "Misc. Organic." At Monticello, this designation has also been applied to the currently unidentified organics recovered from waterscreen and flotation samples. Use "Unidentified" for form, with material as Organic. Unlike other usages of "Unidentified" form,

Organic artifacts are batched by Form. The only measurements that need to be taken are count and weight, unless otherwise specified below.

7.4.01 BEANS

There are two types of beans specifically listed under Form: "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."

7.4.02 CHARCOAL

Due to the high fragmentation of charcoal, it should not be counted, only weighed. A count of “0” should be entered in the count field. Although using “0” is not ideal, it provides a clear sign that the number of pieces in the batch have not been counted.

Charcoal should be cataloged as follows:

Count: 0
Category: “Organic”
Form: “Charcoal”
Completeness: “Incomplete”
Material: “Charcoal”
Manu Tech: “Indeterminate”
Burned?: “No” (Condition tab)

7.4.03 CINDER

Cinder is burned-out coal. It is much lighter in weight than coal and has a much rougher surface (often characterized by the appearance of many tiny air pockets). Even though cinder is a waste product from a burning process, do not catalog it as slag or scrap/waste.

Use the following protocols for cataloging cinder:

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

7.4.04 COAL

Coal should be cataloged as follows:

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

7.4.05 CORN COB AND CORN KERNEL

These are listed as specific, separate Forms. Category and Material are “Organic.”

7.4.06 EGGSHELL

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

Category: “Organic”
Form: “Eggshell”

Material: "Eggshell"
Manu Tech: "Natural"

7.4.07 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"

7.4.08 NUTS

"Walnut Shell," "Pecan Shell," and "Nut, acorn" 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 nut fragments should be recorded as "Nutshell, unid." with material as "Organic."

7.4.09 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."

7.4.10 SEEDS

There are two types of seeds specifically listed under Form "Seed, gourd" and "Seed, watermelon." 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."

7.4.11 SHELL

Shell should be batched based on form; only count and weight need to be recorded.

Category: "Organic"
Form: "Shell, [as appropriate]"
Material: "Shell"
Manu Tech: "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."

7.4.12 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.

Record any 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.”

If you have a button blank (solid bone disk to be covered with fabric), enter that into the Button table.

7.4.13 WOOD

For pieces of wood that are only partially burned, catalog as follows:

Category: “Organic”
Form: “Wood”
Completeness: “Incomplete”
Material: “Wood”
Manu Tech: See below
Burned?: “Yes”

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

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, ask 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.

7.5 STONE/MINERAL ARTIFACTS

7.5.1 BOG IRON

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

“Boulder (>250mm)”
Completeness: “Incomplete”
Material: “Bog Iron”
Manu Tech: “Natural”

7.5.2 FIRE-CRACKED ROCK

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

Category: “Stone”
Form: “FCR”
Completeness: “Incomplete”
Material: As appropriate
Manu Tech: “Indeterminate”

7.5.3 FLAKES

Flakes are generally thin and exhibit characteristic signs of working, such as conchoidal fracture (concentric semi-circular lines of force emanating from the “bulb of percussion,” or the point where the stone was impacted to knock the flake off). Larger flakes may themselves have been utilized as tools. There is no category for utilized flakes in DAACS, so if a large flake appears to have been utilized (i.e. has evidence of edge wear), this should be stated in the Notes. This use wear should not be cataloged as Post-Manufacturing Modification.

Flakes should be cataloged as follows:

Category: “Stone”
Form: “Flake.” If the flake possesses cortex, choose “Flake, cortical.”
Select “Flake, retouched” if the flake shows signs of having small flakes removed to blunt, sharpen, or refine the edge.
Completeness: “Incomplete”
Material: As appropriate
Manu Tech: “Flaked”

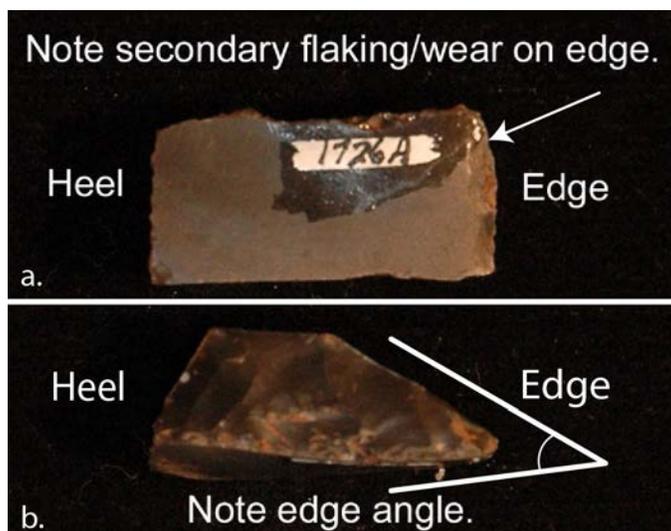
Flakes of the same material and form can be batched. The only measurements that need to be taken are count and weight.

7.5.4 GUNFLINT

Protocols established January, 2008. Form “Gunflint” is used generically to encompass all spall-type/gunspall, flake-type, and blade-type gunflints. See Honerkamp and Harris 2005 (Figs. 6, 7) and Hamilton 1980 (p. 138, 147) for examples of artifacts that fall into these categories. Artifacts that are made from imported, European chert/flint-like material, but lack the size, shape, edge angle, or flaking/use wear properties of gunflint

should not be cataloged as “Gunflint” (rather they should be “Flake” or “Tool, unidentified” as appropriate).

Note on Form: The form category “Strike-a-Light” should not be used for stone artifacts. It should only be used to describe metal strike-a-lights. If you have a chert/flint fragment that may have been used as a “Strike-a-Light,” record its form as “Tool, unidentified” and note wear and/or secondary flaking in the notes.



a. Bottom or bed of broken gunflint, b. Cross section of broken gunflint

Note on Measurements: Length refers to the distance between the “striking” edge, or bevel, (the side that struck the frizzen and that usually has the most acute angle,) and the heel (the end opposite the edge). This is the “axis parallel to the gun when the gunflint is mounted,” following Honerkamp and Harris (2005:101). There are two ways to identify the edge of a gunflint. First, the edge angle often will be more acute than the angles of the other three sides, although the heel angle also can be acute. Second, the edge on a used gunflint can exhibit flake scars on the bed, or bottom, as well as the face, or top, whereas the other sides often have secondary flaking on the face only.

- Count:** Incomplete gunflints can be batched.
- Category:** “Stone”
- Form:** “Gunflint”
- Completeness:** Select “Complete” if all three prepared edges and the striking edge are present and the finished dimensions can be recorded, even if the striking edge is heavily worn. Select “Incomplete” when one or more original edges are missing.
- Material:** “Chert/Flint, honey/brown” refers to microcrystalline material that falls within the Yellow-Red, Muted Medium range (DAACS Detailed Color Group).
“Chert/Flint, grey/black” refers to microcrystalline material that falls within the Neutrals range (DAACS Detailed Color Group).

“Chert/Flint, other” is used to describe gunflints whose color does not fall into the grey/black or honey/brown categories. Please note the color in the notes field.

Manu Tech: “Flaked”

Measurements: Only complete measurements should be recorded in the measurements tab.

Notes: Record the presence of cortex and possible thermal shock damage, such as spalling and discoloration, in the notes.

For more information, see Nicholas Honerkamp and Norma Harris, “Unfired Brandon Gunflints from Santa Maria de Galve,” *Historical Archaeology*, 2005, 39(4): 95-111; T. M. Hamilton, *Colonial Frontier Guns*. Tennessee: Pioneer Press, 1987.

7.5.5 MISCELLANEOUS ROCKS

Unmodified pieces of rock that should not be considered artifacts often end up in artifact bags. They are generally not cataloged into DAACS. Each 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 with the Manufacturing Technique as “Quarried.”

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”

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: “Indeterminate”

Mica and lime can be batched. The only measurements that need to be taken are count and weight.

7.5.6 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”

7.5.7 PROJECTILE POINTS

In DAACS, projectile points include Native American arrow points, spear points, and other small, bifacially-worked points. Although classification systems for projectile points abound, many of these systems are quite complex, and in many cases morphologically similar points that are found in different geographic regions fall under different classification schemes. We employ a simplified classification system for DAACS that relies primarily on overall point morphology for classification.

Conceptually, projectile points are divided into four major groups in DAACS:

- 1) Lanceolate
- 2) Notched
- 3) Stemmed
- 4) Triangular

These forms are described as follows by Hranicky and Painter (1989:7):

- 1) Lanceolate: "Refers to a parallel-edged point that does not have waisting, notching, or shouldering. Lanceolate points are usually long and slender with no distinction between blade and stem."
- 2) Notched: "Refers to a point with circular indentation cut into the lower edges or corners. The notched point is usually a triangular-bladed point that has notches cut into either the side or corner areas of the proximal end of the point."
- 3) Stemmed: "Refers to a point that has a downward extension from the blade at the proximal end. The stemmed point has an extension at the base of the point, which makes the stem noticeably different from the blade."
- 4) Triangular: "Refers to a point with three edges. The triangular point does not have a stem or notching. The sides are usually straight and the base width is often the same as the blade's length."

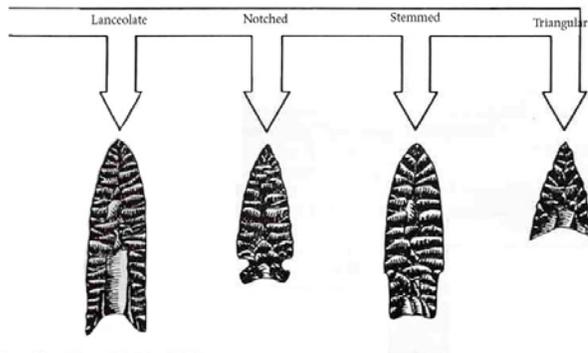
Category: "Stone"

Form: One of the following
"Point, unid"
"Point, lanceolate"
"Point, stemmed"
"Point, corner notched"
"Point, side notched"
"Pointe, base notched"
"Point, triangular"

Completeness: As Appropriate

Material: As Appropriate

Manu Tech: "Flaked"



From Hranicky and Painter 1989:7

7.5.8 SHATTER

The term “shatter” is a catch-all for materials that are probably or possibly, but not definitely, the result of human manufacture (e.g., removing cortex off of a cobble to form tools). Shatter does not clearly have evidence of percussive manufacture by humans, such as conchoidal fracture.

Category: “Stone”
Form: “Shatter”
Completeness: “Incomplete”
Material: As Appropriate
Manu Tech: “Indeterminate”

Shatter of the same material can be batched. The only measurements that need to be taken are count and weight.

7.5.9 SLATE

Category: “Stone”
Forms: One of the following
“Architectural, unid.”: Larger pieces of slate used for roofing or other architectural construction. These pieces should have diagnostic attributes such as finished edges. Record the manufacturing technique as Quarried.

“Tile, roofing”: Use for pieces of slate that have clear evidence of being used as roofing tile, including as nail holes. Record manufacturing technique as “Quarried.”

Pieces of slate with no diagnostic attributes and occurs in geographical proximity to the site should be cataloged either as:

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

“Boulder (>250mm)”

Record the manufacturing technique as “Quarried.”

Pieces of slate with no diagnostic attributes but occur naturally at the site should be cataloged either as:

“Granule (2-4mm)”

“Pebble (4-64mm)”

“Cobble (64-250mm)”

“Boulder (>250mm)”

Record the manufacturing technique as “Natural,” but indicate in the notes if the pieces may be architectural.

“Slate, writing”: Use for pieces of slate with evidence of writing.

Record the manufacturing technique as Quarried. The color of this slate is often dark grey or black; it is often shiny rather than matte in appearance.

Completeness: “Incomplete”

Material: “Slate”

Manu Tech: Determined by Form (see above)

Pieces of slate with no diagnostic attributes can be batched. The only measurements that need to be taken are count and weight.

See Section 7.3.5 on how to catalog Slate Pencils.

7.5.10 ST. BEE'S PURPLE SANDSTONE

Category: “Stone”

Form: “Stone, unidentified, architectural”

Completeness: “Incomplete”

Material: “Sandstone, St. Bees”

Manu Tech: “Quarried”

In the Notes section, record that the stone(s) is/are “St. Bee's sandstone from Cumbria, England.” Measure thickness if the “top” and “bottom” surfaces are intact. Batch if only one or none of these surfaces are present.