DAACS Cataloging Manual: Tobacco Pipes

Commented [JG1]: 1. Excellent, thanks!
2. The biggest issue is formatting. Please format to match Buckle Manual, especially making lists easier to read with bullet points, etc.
3. I made changes to the text that I did not track so feel free to fix any errors I may have (but hope I didn't) introduce.

The DAACS Tobacco Pipe Manual documents how tobacco pipes are cataloged in the DAACS PostgreSQL database. This manual is one of sixteen DAACS Cataloging Manuals. Each manual documents a specific module of the DAACS database, and they provide protocols for using each module. In addition to defining each data field (meta data), the manuals describe how data should be entered into data field, provide guidance on artifact identification., and give examples of how artifacts should be cataloged.

The DAACS database was developed in 2000 by Jillian Galle and Fraser Neiman, in collaboration with members of the [DAACS Steering Committee](). Jillian Galle, Fraser Neiman, and DAACS Staff, including 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, 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 Katherine Grillo produced the initial versions of these DAACS manuals in 2003. They have been continuously 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 Catherine Garcia.

Convoy, a web design and graphic design company based in Charlottesville, Virginia, initially programmed the DAACS database in SQLServer (2001-2013). The University of Virginia's Institute for Advanced Technology in the Humanities (IATH) built and currently maintains the PostgreSQL version of the DAACS database (2014-present). Convoy also designed the original DAACS website (2004), and has since redesigned the website twice (2014, 2024).

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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 TOBACCO PIPE MODULE

The **Tobacco Pipe Module** captures detailed information about tobacco pipe fragments made from any material. All other material culture items related to the smoking (e.g. cigarette filters, cigarette holders) or cleaning and using smoking pipes (e.g. pipe tampers, smoker's companions) should be cataloged into the General Artifacts module.

This manual is divided into three sections. The first section provides details on the fields recorded for the DAACS Gold, Silver and Bronze interfaces and the cataloging protocols. The second section explains what information is recorded in each field. The third section provides instructions on how to catalog specific artifact types.

2.1 COMPARISON OF TOBACCO PIPE ATTRIBUTES RECORDED FOR BRONZE, SILVER, AND GOLD CATALOGING LEVELS

Bronze	Silver	Gold
Artifact Count	Artifact Count	Artifact Count
Completeness	Completeness	Completeness
Material	Material	Material
Manufacturing Technique	Manufacturing Technique	Manufacturing Technique
Decoration?	Decoration?	Decoration?
Text Mark?	Text Mark?	Text Mark?
Metric Bore Diameter	Metric Bore Diameter	Metric Bore Diameter
64ths Bore Diameter	64ths Bore Diameter	64ths Bore Diameter
Weight	Weight	Weight
Notes	Notes	Notes
Image Links	Image Links	Image Links
	Paste Color	Paste Color
	Bowl Form	Bowl Form
	Bowl Base Type	Bowl Base Type
	Mouthpiece Form	Mouthpiece Form
	Decorative Motif	Decorative Motif
	Motif Manufacturing Method	Motif Manufacturing Method
	Motif Location	Motif Location
	Notes	Notes
	Mark Description	Mark Description
	Type of Marks	Type of Marks
	Text Location	Text Location

	Text Frame Motif	Text Frame Motif
	First Name	First Name
	Last Name	Last Name
	Place Name	Place Name
	Slogan/Other	Slogan/Other
	Mark Notes	Mark Notes
		Non-Plastic Paste Inclusion
		Mended?
		Glaze Type
		Glaze Color
		Stem Length
		Exterior Stem Diameter
		Metric Bore Diameter
		64ths Bore Diameter
		Bowl Height
		Maximum Bowl Diameter
		Bowl Rim Diameter
		Bowl Volume
		Maximum Sherd Measurement
		Bowl Form
		Bowl Base Type
		Mouthpiece Form
		Manufacturing Information
		Production Dates

		Manufacture Location
		Post-Manufacturing Modification?
		Conservation?

2.2 LOCATION OF ATTRIBUTES IN THE TOBACCO PIPE MODULE INTERFACE

Field Location in the DAACS Tobacco Pipe Module	Bronze	Silver	Gold
Main Tab	Artifact Count	Artifact Count	Artifact Count
	Completeness	Completeness	Completeness
	Material	Material	Material
	Manufacturing Technique	Manufacturing Technique	Manufacturing Technique
		Paste Color	Paste Color
			Non-Plastic Paste Inclusion
			Mended?
	Decoration?	Decoration?	Decoration?
	Text Mark?	Text Mark?	Text Mark?
			Glaze Type
			Glaze Color
	Notes	Notes	Notes
Measurements			Stem Length
			Exterior Stem Diameter

	Metric Bore Diameter	Metric Bore Diameter	Metric Bore Diameter
	64ths Bore Diameter	64ths Bore Diameter	64ths Bore Diameter
			Bowl Height
			Maximum Bowl Diameter
			Bowl Rim Diameter
			Bowl Volume
			Maximum Sherd Measurement
	Weight	Weight	Weight
Bowl/Mouthpiece		Bowl Form	Bowl Form
		Bowl Base Type	Bowl Base Type
		Mouthpiece Form	Mouthpiece Form
Decoration		Decorative Motif	Decorative Motif
		Motif Manufacturing Method	Motif Manufacturing Method
		Motif Location	Motif Location
		Notes	Notes
Text Marks		Description	Description
		Type of Marks	Type of Marks
		Text Location	Text Location
		Text Frame Motif	Text Frame Motif
		First Name	First Name
		Last Name	Last Name
		Place Name	Place Name
		Slogan/Other	Slogan/Other

		Mark Notes	Mark Notes
Manufacturing			Pipe Maker
			Production Dates
			Manufacturing Location
Condition		Post-Manufacturing Modification?	Post-Manufacturing Modification?
			Conservation?
Images	Link to Images	Link to Images	Link to Images
Objects	Link to Objects	Link to Objects	Link to Objects

3.   BRONZE LEVEL CATALOGING PROTOCOLS

3.1 BRONZE OVERVIEW

Bronze Level cataloging is the fastest, most efficient form of cataloging in the DAACS database. It allows users to batch artifacts using only a small number of diagnostic attributes. The result is the ability to catalog more artifacts at a faster pace. However, think carefully about the analytical tradeoffs. The choice of cataloging level should reflect the research goals, as well as time and/or budgetary considerations, specific to a given project.

If you catalog at the Bronze level, you will not record potentially important pieces of information, such detailed measurements and information on decoration. We also strongly recommend *against* using the Notes field to record further details on decoration or measurements. Adding unstandardized discursive details 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. If you find additional detail decoration or measurements are important to your research, consider using the Silver or Gold interface.

The fields recorded at the Bronze level are:
- Artifact Count
- Completeness
- Material
- Manufacturing Technique
- Decoration? (Y/N)
- Text Mark? (Y/N)

- Metric Bore Diameter
- 64ths Bore Diameter
- Weight
- Links to Images
- Links to Objects

3.2 BRONZE BATCHING PROTOCOLS

Batch all fragments that share the following attributes:

- Completeness
- Material
- Manufacturing Technique
- Presence of text marks
- Presence of decoration
- Stem metric bore diameter (if applicable)
- Stem 64ths bore diameter (if applicable)

Record total count of batch as Artifact Count.

Do not record bore diameters of split stems.

Record Artifact Weight as total weight of batch in grams.

3.3 BRONZE CATALOGING RECOMMENDATIONS

We recommend the following steps for sorting artifacts prior to cataloging. This sorting process will expedite cataloging at the Bronze level.

1. Sort fragments by completeness.
2. Sort completeness groups into smaller groups by material.
3. Sort your Completeness/Material groups into two more groups by decorated/marked and undecorated/marked sherds.
4. At this point, you should have many small piles of sorted pipe fragments on your desk. For example: undecorated bowl fragments of white ball clay, undecorated stem fragments with 3.5mm bore diameters and 9/64th bore diameters, marked stem fragments with 3.4mm bore diameters and 9/64th bore diameters.
5. Note that at the end of this process you could have a "batch" of one fragment. You may have batched groups with numerous sherds, or a group with just one fragment. A batch of one is still a batch and should be recorded using the prescribed guidelines.
6. All attributes must match within a group of fragments to create a batch.

4.   SILVER LEVEL CATALOGING PROTOCOLS

4.1 SILVER OVERVIEW

The main benefit of cataloging at the Silver level is the ability to record more diagnostic attribute data than is available at the Bronze level. This includes data on bowl forms, decoration, and marks. The Silver Level also allows catalogers to work at a faster pace by removing the Gold level requirement to record detailed decoration and measurement data. However, think carefully about the analytical tradeoffs. If you catalog at the Silver level, you will not capture potentially important pieces of information, such as formal attributes and measurements for individual buckle parts that may be temporally diagnostic. On the other hand, batching is not possible at the Silver level (unlike Bronze) and cataloging each fragment individually may be time consuming. The choice of cataloging level should reflect the research goals, as well as time and/or budgetary considerations, specific to a given project.

The fields recorded at the Silver level are:
- Artifact Count
- Completeness
- Material
- Manufacturing Technique
- Paste Color
- Decoration?
- Text Mark?
- Post-Manufacturing Modification?
- Bowl Form
- Bowl Base Type
- Mouthpiece Form
- Metric Bore Diameter
- 64ths Bore Diameter
- Weight
- Decorative Motif
- Motif Manufacturing Method
- Motif Location
- Decoration Notes
- Mark Description
- Type of Marks
- Text Location
- Text Frame Motif
- First Name
- Last Name
- Place Name
- Slogan/Other
- Mark Notes
- Links to Images
- Links to Objects

4.2 SILVER BATCHING PROTOCOLS

4.2.1. FRAGMENTS TO CATALOG INDIVIDUALLY (I.E. NO BATCHING)

Diagnostic fragments *cannot* be batched.

Diagnostic fragments have at least one of the following attributes:
- Decoration or Marks
- Fragments with a completeness of "Base," "Base, Bowl," "Base, Bowl, Rim," "Bowl, Complete," "Bowl," "Bowl, Rim," "Bowl, Base", "Base" with identifiable bowl and/or base types
- "Stem, Mouthpiece" and "Mouthpiece" fragments with identifiable mouthpiece types
- Stems with measurable bore diameters

Additionally, a complete or nearly complete pipe (with portions of Bowl, Base, Stem) is considered diagnostic.

4.2.2 NON-DIAGNOSTIC FRAGMENTS

Batch all non-diagnostic "Bowl", "Bowl, Base" and "Bowl, Rim" fragments that share the following attributes:
- Completeness
- Material
- Manufacturing Technique
- Paste Color

Batch all non-diagnostic "Stem" fragments that share the following attributes:
- Completeness
- Material
- Manufacturing Technique
- Paste Color
- Unmeasurable Bore Diameters

Artifact Count should record the total number of fragments in the batch. Weight should be recorded as the total weight of the batch.

Here is a batching example for non-diagnostic bowl fragments:
If you had 5 pipe bowl fragments:

Main Tab

Artifact Count:	5
Completeness:	"Bowl Fragment"
Material:	"Earthenware, ball clay"
Paste Color:	"5Y9/1, 10Y9/1"
Manu Tech:	"Molded"
Text mark?	"No"
Decoration?	"No"
Bowl Form:	"'Unidentifiable"
Weight: Enter weight of the batch in grams	

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Here is a batching example for non-diagnostic stems:
If you had 3 split stem fragments:

> **Main Tab**
>
> | | | |
> |---|---|---|
> | **Count**: | 3 |
> | **Completeness**: | "Stem" |
> | **Material**: | "Earthenware, ball clay" |
> | **Paste Color**: | "5Y9/1, 10Y9/1" |
> | **Manu Tech**: | "Molded" |
> | **Text mark?** | "No" |
> | **Decoration?** | "No" |
> | **Weight**: Enter weight of the batch in grams |
> | **Notes**: | Split stems. |

5. GOLD LEVEL CATALOGING PROTOCOLS

5.1 GOLD OVERVIEW

The main benefit of cataloging at the Gold level is the ability to record a large number of individualized measurements and the maximum amount of attribute data for every artifact. Cataloging at the Gold level also allows you to capture formal characteristics and measurements for individual tobacco pipe attributes that may be temporally diagnostic. However, think carefully about the analytical tradeoffs. Batching is not possible at the Gold level, and identifying and recording measurements for individual buckle parts can be time consuming and requires a high level of cataloger expertise. The choice of cataloging level should reflect the research goals, as well as time and/or budgetary considerations specific to a given project.

Please note that Gold Level standards represent the original Tobacco Pipe attribute fields that have been part of DAACS since 2001. These original fields were chosen by DAACS staff and material culture scholars. Silver and Bronze Levels are stream-lined versions of the original DAACS Tobacco Pipe module.

The fields recorded at the Gold level are:

- Artifact Count
- Completeness
- Material
- Manufacturing Technique
- Paste Color
- Non-Plastic Paste Inclusion
- Mended?
- Decoration?

- Text Mark?
- Glaze Type
- Glaze Color
- Stem Length
- Exterior Stem Diameter
- Metric Bore Diameter
- 64ths Bore Diameter
- Weight

3

- Bowl Height
- Maximum Bowl Diameter
- Bowl Rim Diameter
- Bowl Volume
- Maximum Sherd Measurement
- Bowl Form
- Bowl Base Type
- Mouthpiece Form
- Decorative Motif
- Motif Manufacturing Method
- Motif Location
- Decoration Notes
- Mark Description
- Type of Marks
- Text Location
- Text Frame Motif
- First Name
- Last Name
- Place Name
- Slogan/Other
- Mark Notes
- Pipe Maker
- Production Dates
- Manufacture Location
- Post-Manufacturing Modification?
- Conservation?
- Links to Images
- Links to Objects

5.2 GOLD BATCHING PROTOCOLS[1]

5.2.1 FRAGMENTS TO CATALOG INDIVIDUALLY (I.E. NO BATCHING):

Diagnostic fragments *cannot* be batched.

Diagnostic fragments have at least one of the following attributes:
- Decoration or Marks
- Fragments with a completeness of "Base," "Base, Bowl," "Base, Bowl, Rim," "Bowl, Complete," "Bowl," "Bowl, Rim," "Bowl, Base", "Base" with identifiable bowl and/or base types
- "Stem, Mouthpiece" and "Mouthpiece" fragments with identifiable mouthpiece types
- Stems with measurable bore diameters
- Fragments with multiple completeness entries (e.g., "Base, bowl"; "Bowl, rim"; "Stem, bowl" etc.)

Additionally, a complete or nearly complete pipe (with portions of Bowl, Base, Stem) is considered diagnostic.

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[1] Please note that new batching rules for all non-diagnostic tobacco pipes were implemented on February 8, 2012. Prior to implementation, all non-diagnostic pipe fragments that had a maximum sherd measurement greater than 15 mm were individually recorded, measured, and weighed.

5.2.2 BATCHING RULES FOR NON-DIAGNOSTIC FRAGMENTS:

Non-diagnostic fragments include:

- Split stems where no measurements other than weight can be recorded.
- Pipe bowl fragments with no decoration or marks

Batch non-diagnostic tobacco pipe fragments by completeness and size.

Here is a batching example for bowl fragments: If you had 5 pipe bowl fragments whose max. sherd size were 35 mm:

Count:	5
Completeness:	"Bowl Fragment"
Material:	"Earthenware, ball clay"
Paste Color:	"5Y9/1, 10Y9/1"
Inclusions:	"None"
Manu Tech:	"Molded"
Mended?:	"No"
Decoration?:	"No"
Glaze Type:	"No Glaze"
Glaze Color:	"Not Applicable"
Mended?:	"No"
Decoration?:	No
Sherd Weight:	Enter weight of the batch in grams (Measurements tab)
Max. Sherd Measurement: 35 mm	
Bowl Form:	"Unidentifiable" (Bowl/Mouthpiece tab)

Here is a batching example for non-diagnostic stems: If you had 3 split stem fragments, each with a max. sherd size of 20 mm:

Count:	3
Completeness:	"Stem"
Material:	"Earthenware, ball clay"
Paste Color:	"5Y9/1, 10Y9/1"
Inclusions:	"None"
Manu Tech:	"Molded"
Glaze Type:	"No Glaze"
Glaze Color:	"Not Applicable"
Mended?:	"No"
Decoration?:	"No"
Notes:	Split stems.
Sherd Weight:	Enter weight of the batch in grams.
Max. Sherd Measurement: 20 mm (Measurements tab)	

6. DAACS TOBACCO PIPE FIELD DEFINITIONS AND PROTOCOLS

6.1 MAIN PIPE TABLE

6.1.1 ARTIFACT COUNT
Numeric
This field documents the number of artifacts in that record. For example, a count of one means there is one sherd being described in that record, or row, of data. A count of 13 means there are 13 fragments described by the other fields in the record.

6.1.2 COMPLETENESS
Controlled Vocabulary
This field records which part(s) of the tobacco pipe you have. For Reed/Stub stem pipes, select one of the Completeness entries with "Mouthpiece" if you have the end of the stem of the pipe intact.

6.1.3 MATERIAL
Controlled Vocabulary
This field records the material type of the artifact being cataloged.

The default is "Earthenware, ball clay." The other options are:
- "Earthenware, agatized" (Used for pipes where the paste was formed by wedging two or more clays together, usually red and white/yellow)
- "Earthenware, other"
- "Ivory"
- "Metal"
- "Plastic"
- "Porcelain"
- "Steatite" (Steatite, also known as soapstone, is a type of metamorphic rock that is composed primarily of talc. It is soft and has a soapy feel. It is typically gray, bluish, green, or brown in color)
- "Stone" (Use for any stone that is not steatite)
- "Stoneware"
- "Unidentifiable"

Distinguishing ball clay pipes imported from the UK and the European continent from locally made pipes produced in the Southeastern US (pre-Contact or Colonial period) can be difficult, especially for pipes excavated early to mid-17th century sites in the British Atlantic. For DAACS, any molded, finely made white pipe with few visible inclusions is cataloged as "Earthenware, ball clay." Earthenware pipes with darker paste colors (buff, pink, brown) and consistent inclusions that vary in size and material should be called "Earthenware, other."

6.1.4 MANUFACTURING TECHNIQUE
Controlled Vocabulary

The manufacturing technique field indicates whether the pipe was molded, carved, handmade without the use of carving or molds, or of unidentifiable manufacturing technique.

Select either:

"Carved": Use only for stone and ivory pipes. Carving is a reductive technique – i.e. it removes material. It is often used primarily to shape the overall form for a pipe or pipe bowl.

"Molded": Technique where material (most often some form of clay) is shaped by a mold. Imported ball clay pipes should always be "Molded." Earthenware, other, Earthenware, agatized, Porcelain, and Stoneware pipes can be molded. Key diagnostic attributes of molded pipes: mold seams that run down the front or back of the bowl or along length of stem or facets in the same areas created from seam removal. Molded decoration (generally raised from the surface, very regular in application like ribs or repeating elements) can also be an indicator of molding. Can also be used for metal pipes if they look to be cast.

Close up of mold seam integrating into a botanical element (Image ID 1891, Utopia III, Artifact ID 1013-061-8B-DRS—00041).

"Handmade": Used for pipes made by human hands without the use of molds through methods other than carving. "Earthenware, other" and "Earthenware, agatized" pipes are the most common varieties. Look for a lack of mold seams and irregularities in the shape of the bowl and stem.

"Unidentifiable": Used most often for earthenware, other ceramic pipes that lack diagnostic molded attributes but demonstrate regularity in shape that makes it difficult to identify whether it is fully handmade.

6.1.5 PASTE COLOR
Controlled Vocabulary
This field records the primary paste color of the pipe fragment in the record.

The default for ball clay pipes is currently "5Y 9/1, 10Y 9/1." For porcelain pipes, select "5Y 9/1, 10Y 9/1." For "Earthenware, other" pipes, use the **Paste Color Groups** section of the DAACS Color Book to identify the paste color.

For all other types of pipes (including "Stoneware"), enter "Not Applicable."

6.1.6 NON-PLASTIC PASTE INCLUSION
Controlled Vocabulary

- "Black, Unid."
- "Grog"
- "Hematite"
- "Limestone"
- "Mica"
- "None"
- "Quartz <=0.5mm"
- "Quartz >=0.5mm < 4.0mm"
- "Quartz >4.0mm"
- "Quartz, size n/r"
- "Red, unid."
- "Rock, other"
- "Rock, uid <=0.5mm"
- "Rock, uid >=0.5mm < 4.0mm"
- "Rock, uid >4.0mm"
- "Rock, uid size n/r"
- "Rock, white"
- "Shell"
- "Voids, fiber"
- "Voids, shell"
- "Voids, uid"

6.1.7 MENDED?
Controlled Vocabulary
The default for this field is "No." If the mended sherd is actually glued to another sherd, enter "Yes, Physically Mended." If sherds mend together, but are not physically glued enter "Yes, Mends But Not Physically" in this field.

6.1.8 TEXT MARK?
Controlled Vocabulary

This field records in a simple Yes/No fashion if the fragment has a text mark. Choose "Yes" or "No" depending on whether a text mark is present. Be sure to fill out information about Marks under the Marks tab (as opposed to decoration) and additional observations in the Notes field.

6.1.9 DECORATION?
Controlled Vocabulary

This field records in a simple Yes/No fashion if the fragment is decorated. Choose "Yes" or "No" depending on whether a decoration is present. Be sure to fill out information about Decoration under the Decoration tab and additional observations in the Notes field. Also be sure to consider whether a potential decoration could be a frame for a text mark. If it is a frame, it should be entered on the Text Marks tab.

Clay pipe with frame around maker's mark that could be mistaken for decoration (Image ID 2101, Utopia III, Artifact ID 1013-058D-DRS—00005)

6.1.10 GLAZE TYPE
Controlled Vocabulary
- "Lead Glaze"
- "No Glaze"

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- "Non-Lead Glaze"
- "Salt Glaze"
- "Unidentifiable"

6.1.11 GLAZE COLOR

Controlled Vocabulary
Use the detailed colors portion of the DAACS Color book and match the color of the glaze to range of chips that are closest in color.

Lead glazed tobacco pipe fragment, Image ID 2355182,
Trents Early Settlement, Artifact ID 1231-4.2-DRS--00005

6.1.12 NOTE ABOUT BURNING

Unlike most other artifact types, there is no specific field in DAACS to indicate whether or not a tobacco pipe has been burned. It is assumed that most tobacco pipes will be burned on their interior surfaces. If a tobacco pipe has particularly extensive or otherwise noteworthy burning or residue, enter this information into the Notes.

6.2 MEASUREMENTS

6.2.1 METRIC BORE DIAMETER

Numeric
Measure the metric bore diameter using millimeter drill bits. Enter the size of the **largest** drill bit that fits entirely through the pipe stem.

6.2.2 64THS BORE DIAMETER

Numeric
Measure the 64ths bore diameter using 64ths/inch drill bits. Enter the size of the largest drill bit that fits entirely through the pipe stem. You do not have to enter the "64" in the field. If you have, for example, a bore diameter that measures 4/64ths, only enter in "4" (instead of "4/64").

6.2.3 ARTIFACT WEIGHT

Numeric

Record weight of individual fragment or batch in grams.

6.3 BOWL/MOUTHPIECE INFORMATION

6.3.1 BOWL FORM
Controlled Vocabulary
The numbers in this field are based on a tobacco pipe classifying system developed by Atkinson and Oswald for imported ball clay pipes with additional terms added for locally made pipes.

See Appendix 1 for the complete list of figures and numbers to use with ball clay pipes. If you have a complete or nearly complete pipe bowl, try to find a matching figure in Atkinson and Oswald, and record the corresponding number. If you have a bowl fragment that is only similar to one of the figures, list the Bowl Form as "Variant," and record in the Notes the corresponding figure.

The additional terms pertain to faceted bowls and are used for "Earthenware, other" pipe bowls. If you have a faceted bowl try to find a matching figure using the three examples pictured in the Appendix.

For every unidentifiable bowl fragment, Bowl Form should be recorded as "Unidentifiable" (not "Missing Information").

6.3.2 BOWL BASE TYPE
Controlled Vocabulary
Record base type for any fragment that includes the pipe's base.

> **"Spur"**: Thin, pointed "spur" to rest the bowl on. Generally, a spur is longer than it is wide. See Bowl Type 6 as an example.

> **"Heel"**: Raised, flattened pedestal to rest the bowl on. Generally, a heel is wider than it is long. See Bowl Types 5, 7, and 13 as examples.

> **"Flat"**: Flattened surface to rest the bowl on. These can be similar to heeled pipes (those with spur or heel), but Flat-based pipes do not have the same raised, pronounced heels as heeled pipes. See Bowl Types 2, 3, 11, and 12 as examples.

> **"Heel-less"**: The pipe has no spur, heel, or flattened surface to rest the bowl on. See Bowl Types 24 and 30 as examples.

> **"Unidentifiable"**: For every unidentifiable base fragment, Bowl Base Type should be recorded as "Unidentifiable" (not "Missing Information").

6.3.3 MOUTHPIECE FORM
Controlled Vocabulary

Record mouthpiece form for any fragment which includes the pipe's mouthpiece. The following descriptions are from Higgins 2000:488 and Higgins 2017: Section 6.5.

"Cut": The mouthpiece is formed by running a trimming knife around the end of the stem to trim off the surplus clay. The pipe is usually held at a slight angle. Higgins notes key diagnostics as:
- beveled end,
- the presence of a slight ridge immediately around the stem bore from where the molding wire was withdrawn and drew a bit of clay out with it, or
- otherwise unfinished and no other molded alteration is present

Higgins (2017: Section 6.5) also notes this is the most common mouthpiece form for all pipes dating from before c. 1840 and on many of the types produced after that date.

Cut mouthpiece shape (Image ID 2356334, Trents Early Settlement, Artifact ID 1231-18.8-DRS--00036)

"Rounded": The mouthpiece is formed in the mold as a simple rounded end. Higgins (2017:Section 6.5) notes that mold seams can usually be seen right up to stem bore and there is no cut stem facet. He also notes that these generally occur on pipes dating to the late 19th century or later.

"Nipple": A circular sectioned stem that terminates with a molded nipple.

Nipple mouthpiece shape (Image ID 2355425, Trents Early Settlement, Artifact ID 1231-7.2-DRS—00016)

"Diamond Shape": The stem ends with a diamond-shaped cross section but without a nipple.

"Diamond Nipple": Where the stem takes on a lozenge or sharply oval section in shape directly before the nipple. Higgins (2017: Section 6.5) notes that this occurs only from the mid-19th century onwards.
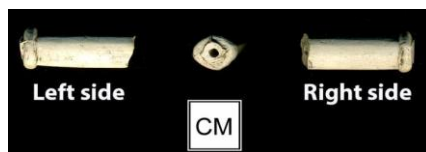
Diamond Nipple Mouthpiece (Image ID 193075, Morne Patate Village, Artifact ID 1243-5231-DRS—00046)

"Flattened Oval": The stem takes on a flat, oval, section at the tip, without a nipple.

"Reed/Stub Stem": A stem that ends very near the bowl, with an opening for a long reed to be inserted and used as the pipe stem. See Section 8.3 for a cataloging example of this Form.

Reed/Stub stem pipe (Image ID: 1965175, First Hermitage, West Cabin, Artifact ID 1412-97-03-084-DRS—00013)

"Unidentifiable": For every unidentifiable mouthpiece fragment, Mouthpiece Type should be recorded as "Unidentifiable" (not "Missing Information").

6.4 DECORATION

6.4.1 DECORATIVE MOTIF*
Controlled Vocabulary
Select from the following list. If you have a molded flower, for instance, choose "Botanical" as the Decorative Motif. An incised decoration on a locally made pipe might be "Geometric." All decoration should also be thoroughly described in the Decoration Notes field.

Note: Any decorative motif that is a component of a maker's mark (such as a crown or floral cartouche) should be cataloged in the Text Mark tab, not the Decoration tab.

*See Appendix 2 for example images of decorative motifs.

Decorative Motif	Description
"Anthropomorphic"	Any image showing a human figure or any part of the human body. Examples include a hand/gauntlet, bust, and arm/leg.
"Botanical"	Any botanical, floral, or plant element or elements.
"Coat of Arms"	Includes personal, city, or royal coat of arms.
"Geometric"	Any abstract geometric design. Examples include scallops, dogtooth band, plain band, and diamonds. Most often seen on locally made pipes.
"Other, pictorial"	Graphic representation not covered by any other category. Examples include a fleur-de-lis, heart, cross, and castle.
"Unidentifiable"	Used whenever a decoration is too small or fragmentary to identify.
"Zoomorphic"	Any image showing an animal, either real or mythological.

6.4.2 MOTIF MANUFACTURING METHOD
Controlled Vocabulary
Select one from the following list:

"Agatized": decoration consists of paste formed by wedging two or more clays together (usually red and white/yellow). Also note that this can be entered as a material type if an agatized paste is used for the entire pipe.

"Carved": Only to be used for stone tobacco pipes. Use to capture decoration used to shape a portion of the pipe, rather than decoration that cuts into a surface (i.e. engraving or incising). For example, use this term to describe a stone tobacco pipe bowl carved into the figure of an animal or a bowl that has carved facets.

"Incised": Incising is defined here as a cut decoration made using a pointed tool to mark or alter the surface of the pipe, as opposed to changing the shape of its form.

"Molded": Decorations produced used designs carved into the walls of molds.

"Punctate": Punctation is defined here as an impressed decoration made with a small tool that produces a single mark with each impression. Possible tools include: bone, shell, stick, reed, fingernail, and many other items. Punctation may be shallow or deep, and impressions may be direct or beveled. Punctates may be arranged in a variety of configurations.

"Roulette": Stamping that takes the form of a singular shape or series of shapes repeated over a surface. Generally understood to be executed by rolling a wheel with a repeated stamp over the surface. Higgins notes that from around 1600 to the early eighteenth century the "milled" decoration on the exterior rim of ball clay tobacco pipes was done using a serrated blade. This should be recorded as "Roulette".

"**Slipped/Painted**": Added layer of transparent/translucent decoration. Be careful not to confuse this for glazing or added wax. Wax tends to be opaque and tends to appear on the stem near the mouthpiece for ball clay pipes. Can be used to record white inlay found within stamped decorations on locally made pipes (see Figure below).

"**Stamped**": Use for stamping that does not look to have been executed by rolling a wheel with a repeated stamp over the surface (i.e. a regularly spaced repeating shape or series of shapes). Stamping differs from punctation in that it covers a larger surface area with a single impression, producing multiple marks.
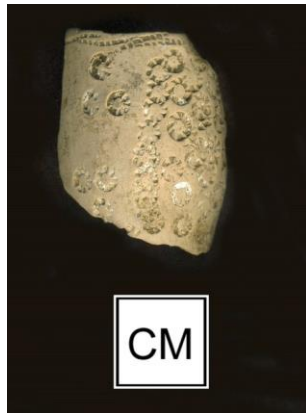
Example of stamping with white inlay (Image ID 2778341, 44PG92,
Artifact ID 1055-F12_NW_L03-NOS—00003)

6.4.3 MOTIF LOCATION

Controlled Vocabulary
Select one from the following list (Higgins 2000):

"BA": On Bowl, facing away from the smoker.

"BB": Beneath the Bowl when a pipe has neither heel nor spur.

"BC": On Bowl, circumference of bowl rim.

"BF": On Bowl, facing smoker.

"BI": On Bowl, interior
Note: this is a rare occurrence. See
http://scpr.co/PDFs/Resources/White%20BAR%20Appendix%204.pdf for more
information.

"BL": On Bowl, on left hand side as smoked.

"BO": On Bowl, covering entire bowl.

"BR": On Bowl, on right hand side as smoked.

"BU": On Bowl, unidentified location.

"H": On Base of Heel.

"RS": Rouletted stem, a continuous band or zone around the stem.

"SA": On top of the stem, reading along the length of the stem.

"SB": Decoration located at the juncture of the bowl and stem, most often a continuous roulette band around the stem directly at the stem's juncture with the bowl.

"SH": On Sides of Heel.

"SL": Stamp or decoration along the length of stem, on left hand side as smoked.

"SM": Multiple individual stamps tight around the stem, as a band or pattern.

"SP": On Base of Spur.

"SR": Stamp or decoration along the length of stem, on right hand side as smoked.

"SS": On Sides of Spur.

"ST": Stem twist, a specific form of roll stamp forming a spiral of shallow grooves around the stem.

"SX: On top of the stem, reading across the stem (text encircling the stem).

6.4.4 NOTES
Open Text Field
Provide a brief description of the decoration. Be sure to capture any aspects not described by controlled authority terms.

6.5 TEXT MARKS

Any lettering or maker's mark on a tobacco pipe should be recorded in the Text Mark Information Tab. Similarly, any decorative motif that is a component of a maker's mark (such as a crown or floral cartouche) should be cataloged in the Text Mark tab, not the Decoration tab.

6.5.1 MARK DESCRIPTION
Open Text Field
This field should be used to describe the spatial relationship between multiple marks on a single pipe, or to record the spatial relationship between marks and decoration.

Any other information that does not fall into Name, Place Name, or Slogan should be noted in Mark Description. For example, any specific description of frame motif, particularly associated with the maker's mark (such as a crown or floral design) should be included here, rather than in the Decoration tab. Any references to specific designs or manufacturers should be included here.

6.5.2 MARK SPECIFICS

This is a related table which requires that each part of the text mark is recorded separately if there are multiple types of marks, and/or if the marks or motif occur in different locations on the same pipe.

6.5.2.1 TYPE OF MARKS

Controlled Vocabulary

This is the Manufacturing Technique of the text mark. Choose one from the following list:
- "Incised"
- "Ink/Rubber Stamped"
- "Molded"
- "Stamped": Impressed rather than Ink/Rubber Stamped
- "Transfer Printed"

Note on molding vs. stamping:
Higgins (2017: 6.11) notes that molded marks may have slightly blurred lettering or small gaps in the characters.

19th century marks, left – stamped, right – molded (Higgins 2017: 5.0)

6.5.2.2 TEXT LOCATION

Controlled Vocabulary

See the Motif Location description (Section 6.21) for the complete listing of abbreviations used in this field. Again, if marks or motifs have different text locations, create separate mark entries.

6.5.2.3 TEXT FRAME MOTIF

Controlled Vocabulary

This is the border surrounding the lettering. If there is no border, enter as "Un-Bordered lettering (any arrangement)." Choose others from the following list:

- "Circular or sub-circular"
- "Crescent"
- "Four Lobes"
- "Heart-shaped"
- "Irregular Border"
- "Octagonal"
- "Rectangular"
- "Shield"
- "Square"

6.5.2.4 FIRST NAME

Open Text Field

Record any lettering on the tobacco pipe exactly as it appears, including partial lettering. If the pipe only has the maker's initials, enter into First or Last Name field as appropriate. If the cataloger is unsure of a letter or word, a question mark in brackets should be used to denote this uncertainty [?]. This symbol can follow a letter or word, or stand on its own if entirely illegible. If the full name based on an initial or partial letter is known, enter into Mark Notes.

6.5.2.5 LAST NAME

Open Text Field
See Section 6.5.2.4 (above).

6.5.2.6 PLACE NAME

Open Text Field

Record any lettering on the tobacco pipe exactly as it appears, including partial lettering. Add other information to the Mark Notes field (e.g., Glasgow as Place Name on the pipe, with Scotland in Mark Notes).

6.5.2.7 SLOGAN/OTHER

Open Text Field
Any additional text that is not a manufacturer or place name. Record exactly as it appears.

6.5.2.8 MARK NOTES

Open Text Field

If the full name based on an initial is known, this information should be recorded in the Mark Notes field (e.g., "W stands for William" or "LON was likely LONDON"). If Maker or Manufacturer Location is included in the pipe mark, also record this information in the Manufacturing tab (see below).

6.6 MANUFACTURING INFORMATION

Use these fields to record information about individual pipe makers and manufacturing locations.

6.6.1 PIPE MAKER
Open Text Field
Record the name of the pipe maker if known.

6.6.2 PRODUCTION DATES
Open Text Field
Record the date range that the manufacturing was producing pipes.

6.6.3 MANUFACTURE LOCATION
Open Text Field
Record the location or locations in which the manufacturer worked.

6.7 CONDITION

6.7.1 POST-MANUFACTURING MODIFICATION?
Controlled Vocabulary
Choose "Yes" or "No." Disregard the "N/A" option.

Post-Manufacturing Modification should be "Yes" when an artifact appears to have been physically modified. For example, if a pipe exhibits indentations in the form of teeth marks near the mouthpiece or grinding/polishing that suggests the mouthpiece was re-formed after the stem breaking, enter "Yes" and describe the modification in the Notes field.

6.7.2 CONSERVATION
Open Text Field
The default is "No Conservation." If the tobacco pipe has been conserved, enter "Yes" into this field and describe the conservation in the Notes (Main tab).

6.8 IMAGES

Please see the manual on Image capture and entry into the database.

6.9 OBJECTS

Please see the manual on Object entry into the database.

7. SPECIFIC CATALOGING EXAMPLES

7.1 IMPORTED KAOLIN PIPES

Material:	"Earthenware, ball clay"
Paste Color:	"5Y 9/1, 10Y 9/1"
Inclusions:	"None"
Manu Tech:	"Molded"
Glaze Type:	Usually "No Glaze"
Glaze Color:	For unglazed pipes, enter "Not Applicable." For glazed pipes, identify the glaze color using the **Detailed Color Groups** section.

7.2 LOCALLY MADE PIPES

Material:	"Earthenware, other"
Paste Color:	Identify the paste color according to the **Paste Color Groups**.
Inclusions:	Identify the primary inclusion; any other significant inclusions can be recorded in the Notes field.
Manu Tech:	Usually "Molded," but can be "Handmade."
Glaze Type:	No Glaze
Glaze Color:	Not Applicable

7.3 REED/STUB STEM PIPES

Completeness:	Choose appropriate completeness for artifact. Reed pipes are not listed as "Complete Pipe" unless the reed stem is intact.
Material:	Usually "Earthenware, other"
Paste Color:	Identify the paste color using the **Paste Color Groups** if material is Earthenware. Stone pipes should be "Not Applicable."
Inclusions:	Identify the primary inclusion; any other significant inclusions can be recorded in the Notes field.
Manu Tech:	Usually "Molded"
Glaze Type:	"Lead Glaze," "Non-Lead Glaze," "No Glaze," "Unidentifiable." Most reed pipes are either "No Glaze" or "Lead Glaze."
Glaze Color:	"Not Applicable" or, if present, identify the glaze color using the **Detailed Color Groups** section.

Measurements Tab

Stem Length: As appropriate for the pipe
Exterior Stem Diameter: As appropriate for the pipe
Metric Bore Diameter: Do not record

18

64ths Bore Diameter: Do not record
Record all applicable bowl measurements.
Always record weight.

Bowl/Mouthpiece Tab
      Bowl Form: "Not Applicable"
      Bowl Base Type: Usually "Heel-less." Also "Unidentifiable," Only fill out if
         base is present.
      Mouthpiece Form: "Reed/Stub Stem." This should be recorded even
      when the reed stem is not present.

8. BIBLIOGRAPHY

Atkinson, David and Adrian Oswald
1969   "London Clay Tobacco Pipes." *Journal of the Archaeological Association*. Third Series vol. XXXII.

Higgins, David A.
2000 A Catalogue of the Clay Tobacco Pipe Stamps Found in England. NPA home (pipearchive.co.uk)

2017 Guidelines for the Recovery and Processing of Clay Tobacco Pipes from Archaeological Projects. National Pipe Archive, NPA home (pipearchive.co.uk).

Commented [JG6]: Make sure Bibliography is complete. I added Atkinson and Oswald but there may be others mentioned in the body that need to be here.

9. APPENDIX 1: TOBACCO PIPE BOWL FORMS

Figures 1 and 2 have been reprinted from:
Atkinson, David and Adrian Oswald.
1969   "London Clay Tobacco Pipes." *Journal of the Archaeological Association*. Third Series vol. XXXII.

FIG. 1. Bowl Types, c. 1580–1680.

FIG. 2. Bowl Types, c. 1680–1900.
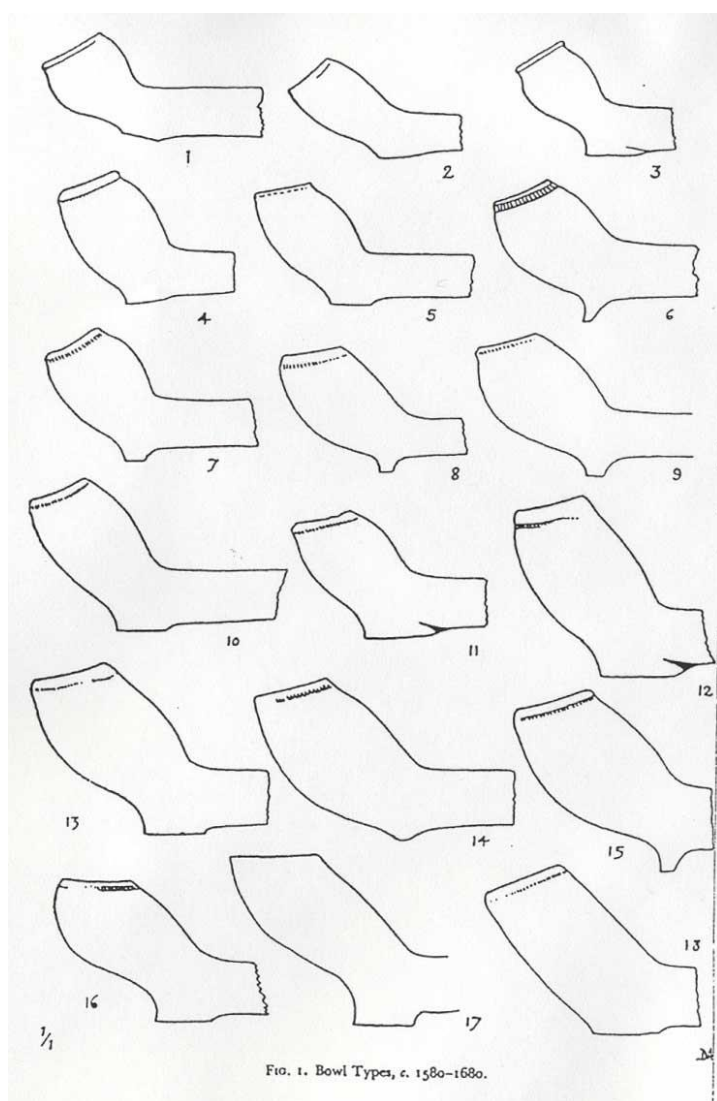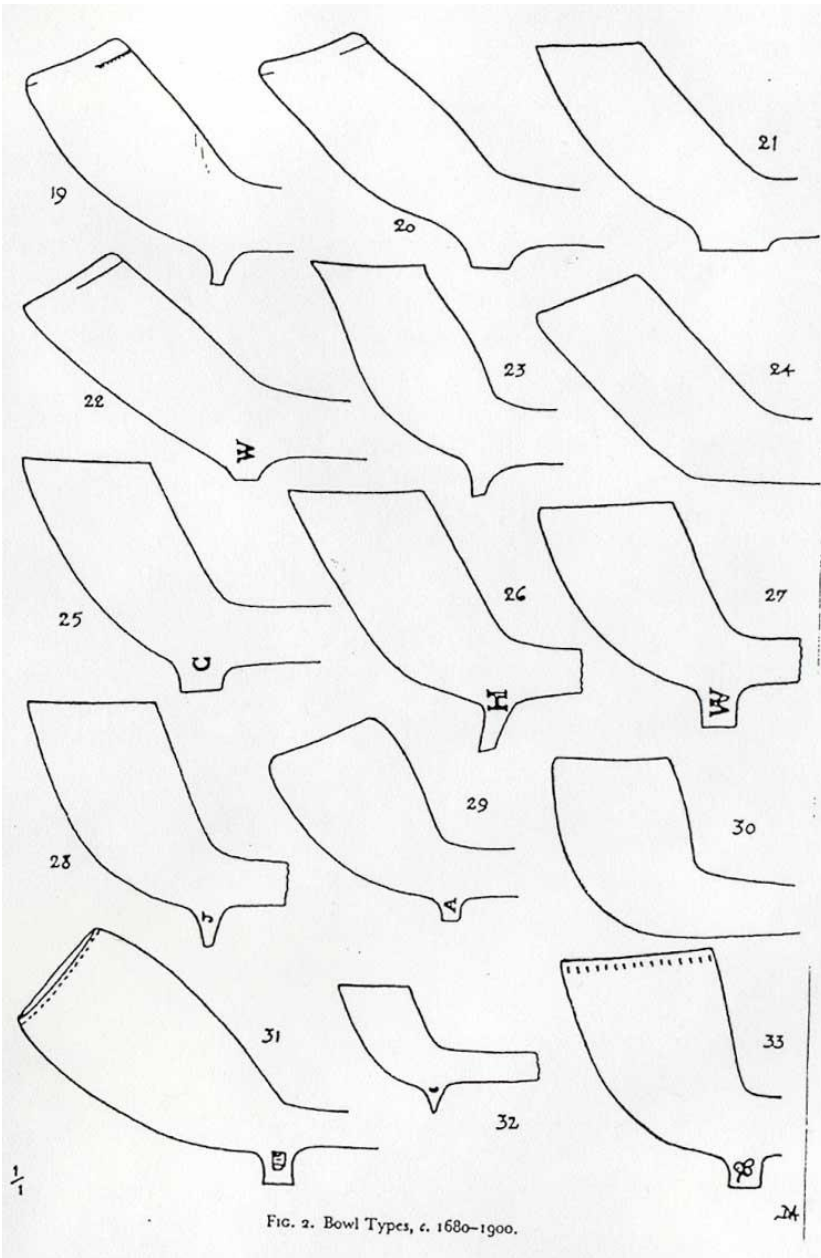
Fig. 1

1.   Handmade. c.1580-1610.
2.   c.1580-1610.
3.   c.1580-1610. Heart-shaped base. Milling on the rim of these early types is rare.
4-8.   c. 1610-1640. In this period the two main types of the seventeenth century
        develop; flat bases and spurs. Milling usual.
9-10.   c. 1640-1660. Increase in size.
11-12. c. 1640-70. Heart-shaped bases.
13-15. c. 1660-1680. No. 14 with degenerate spur occurs in large and small
        bowl sizes.
16-17. West Country style with overhanging bowl and the line of the mouth parallel
        or nearly so with the line of the stem. Copied by some London makers.
18.   c. 1660-1680. A new type with straight sides, developing into types 20 and 22.

Fig. 2

19.   c. 1690-1710. Late spur type.
20-22. c. 1680-1710. Long bowls some molded initials on sides of base.
23.   c. 1690-1720. West Country style, thin brittle bowls.
24.   c. 1700-40. American export style occasionally found in London.
25.   c. 1700-70. Common standard southeastern type for the eighteenth century. The lip of
        the bowl parallel to the stem, a change that occurred about 1700. Bowl sizes vary, the
        earlier are longer and narrower, the thickness of stem and bowl decreases as the
        century wears on. No milling.
26.   c. 1740-1800. New type with forward spur, thin bowls, sometimes decorated.
27.   c. 1780-1820. Thin brittle bowl, flat based spur.
28.   c. 1820-40. Pointed spur, small initials.
29.   c. 1840-80. Forward drooping bowl, small spur.
30.   c. 1850-1910. Copy of the briar.
31.   c. 1850-1910. Copy of Dutch type.
32.   c. 1840. Occasionally found in London. Miniature.
33.   Post 1840. Irish type. Although often stamped Dublin these were made at
        several centers in Britain from a type mold supplied to several makers.

Three terms have been added to capture bowl shapes found on earthenware, other pipe bowls:

- Faceted, part – bowls where the facets only cover part of the bowl
- Faceted, fully – bowls where the facets run the entire length of the bowl, i.e. extend from the rim to the base of the bowl
- Faceted, unid. – bowl fragments where it is difficult to determine whether the facets ran the entire length of the bowl

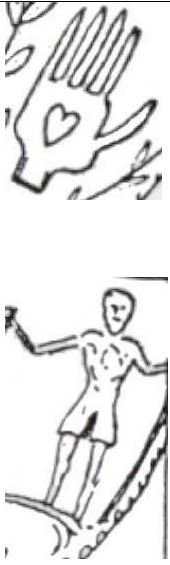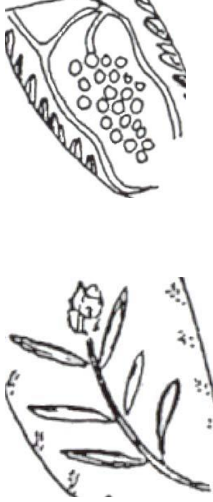*Partially faceted bowl, ID 286518, 44PG92, Artifact ID 1055-F03_N_CU-NOS—00009*
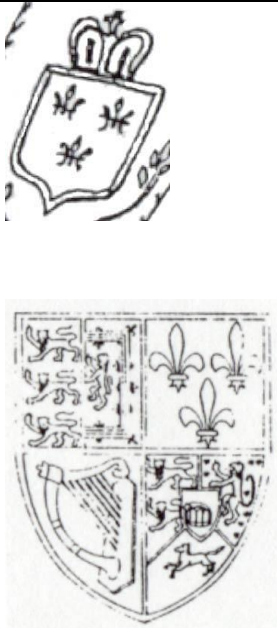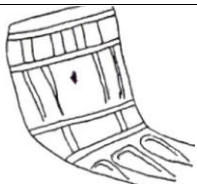
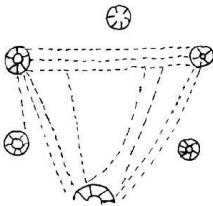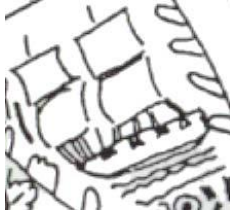*Fully faceted bowl, Image ID 2921135, 44PG65, Artifact ID 1058-194H_08B-NRD--00025*

Bowl fragment where it is not possible to determine whether bowl is
fully faceted or partially faceted, Image ID 2868587, 44PG92, Artifact ID 1055-F12_NE_L01-NOS--00304

10. APPENDIX 2: TOBACCO PIPE DECORATIVE MOTIF

Decorative Motif	Description	Image
Anthropomorphic	Any image showing a human figure or any part of the human body. Examples include a hand/gauntlet, bust, and arm/leg.	
Botanical	Any botanical, floral, or plant element or elements.	

Coat of Arms	Includes personal, city, or royal coat of arms.	
Geometric	Any abstract geometric design. Examples include scallops, dogtooth band, plain band, and diamonds. Most often seen on locally made pipes.	

Symbolic	Any design having a commonly understood symbolic function. Examples include a fleur-de-lys, heart, cross, castle, and star.	

Unidentifiable	Used whenever a decoration is too small or fragmentary to identify.	
Zoomorphic	Any image showing an animal, either real or mythological.	