

## General Guidelines for Determining the Collection and Curation of Archaeological Materials Made under 1A-32 Permitting

These guidelines address issues concerning the collection and curation of archaeological materials under a 1A-32 permit. The standards for preparing recovered materials for curation submissions (e.g., sorting, bagging, cataloging, etc.) can be found in a separate document issued with each new 1A-32 permit.

### Summary

- I) Phase I follows a minimal collection strategy.
- II) Previously recorded sites with known human remains should not be tested or surface collected *without prior authorization* from BAR staff handling research permits.
- III) Phase II and III collections are limited to:
  - the sampling volume necessary for research/mitigation goals;
  - the amount that can be sorted, cataloged, and analyzed to 1A-32 standards within the permitting period.
- IV) In the process of selecting materials to collect and curate:
  - record but do not curate modern, non-cultural, or unidentifiable oxides (e.g., rusted iron); retain only a sample if necessary;
  - do not curate bulk, generic, recovery samples (e.g., featureless glass fragments; prehistoric ceramic residuals; heavily oxidized metal fragments; etc.);
  - only curate *a sample* of highly redundant and identifiable material (e.g., nails, commercial brick, manufactured bottles, etc.).
- V) In handling non-curated materials, consider:
  - the degree to which the site is threatened;
  - the class of materials (e.g., residual brick fragments and unidentifiable oxides may follow one post-curation strategy, while prehistoric ceramic fragments follow another strategy);
  - discard options- landfill, on site reburial or nearby secure state property (per consultation with BAR and the land managing agency).



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## **I) General Guidelines for All Phases of Investigation**

BAR relies on the professional judgment of the field investigators to determine the quality and quantity of material to be collected to achieve the goals of the project, and what material is significant enough to curate. Not all archaeological materials need to be curated, but all collected materials should be documented in the artifact catalog. A record also should be made of materials that were not collected but only observed.

Obvious considerations for recording and discarding include:

- hazards to health and safety (e.g., asbestos tile fragments);
- unidentifiable iron or other oxidized (rusted) fragments;
- objects that have deteriorated beyond meaningful identification;
- plastic and other modern trash;
- unmodified, locally occurring natural pebbles or concretions and any other non-cultural materials;
- charcoal other than C14 samples;
- screen residue after sorting and removal of standard recovery;
- any other material clearly not significant to the historic interpretation of the site.

BAR urges thoughtful selection of items that are unlikely to be targeted for complete analysis and identification. In Phase I investigations, some surface materials such as decomposed shell, small, non-diagnostic ceramic sherds, lithic debitage, etc. may not require collection, especially if they are represented in bulk.

Please contact BAR prior to field work to discuss if a project is expected to generate bulk samples of any kind, but especially soil, unmodified shell, historic construction rubble (e.g., daub), lithic quarry materials, historic dump discard, etc.

BAR will not accept geological samples (e.g., chert samples) or Paleontological samples unless they have a specific archaeological context and were collected to answer specific research questions. Where possible, BAR can suggest alternate repositories.

BAR will not accept bulk soil samples; if important to later research, they may be kept by the organization planning the future research.

BAR will not accept bulk shell samples; if important to later research, they may be kept by the organization planning the research.

## **II) Phase I Survey Guidelines:**

### Non-site Archaeological Occurrences (AO)

If an AO status for a locale can be determined in the field, there may be no reason to collect artifacts from it. The locale can simply be reported. If material is collected, but later a decision is made to not to record the locale as a site, there may be no reason to formally curate collected items.

### Previously Discovered Sites

Unless significantly new information about a previously recorded site can be determined, it is recommended that no additional collection be made during Phase I investigations. Exceptions may include complete artifacts or fragments with sufficient integrity to allow typological and temporal assignment, especially if not previously recorded at the site or if the artifacts are at risk of being looted.

Any previously recorded sites with known human remains should not be tested or surface collected *without prior authorization* from BAR staff handling research permits.

### Newly Discovered Sites

Fully diagnostic, uncommon, reasonably complete artifacts should be collected and curated. Other materials should be selectively collected during Phase I, placing as much reliance on notes and photos as an alternative to collection.

Sampling is strongly stressed during a Phase I project. While it is important to document the material classes present, this can be done without extensive collecting.

If a broader collection strategy is followed, the total collection can be reduced to samples for the purposes of curation. The amount of material retained for curation should be sufficient to document diversity within a type, but unidentifiable and/or common and redundant items can be reduced to a sample. This is especially true where field methodology relies on auger or shovel tests that reduce stratigraphic control.

### **III) Phase II and III Guidelines**

Archaeological excavation in the face of limited curation space requires that permitted archaeologist give careful consideration to what materials they choose to collect and curate. In order avoid oversampling beyond lab capacity and time/money constraints, it is important to determine an explicit collection strategy prior to field work.

Complete or near complete objects from prehistoric sites are usually curated. However, complete or nearly complete objects from historic sites may not be unusual, so retaining only a sample of each type may be appropriate. For example:

- Out of 25 identical, machine-made, bleach bottles recovered from an historic dump, it is recommended that only a few be collected and curated.

- Out of 100 nail fragments from a single provenience, it is recommended that only a sample of each recognized manufacturing method type be collected and curated.

Fragmentary objects with diagnostic attributes (e.g., patterns, complete dimensions, temporal attributes, stylistic attributes, use-wear marks, makers' marks, etc.) are important for comparative analysis and usually are curated. However, if there is a large amount of redundancy within a specific provenience, it is recommended that only a sample be curated, especially where identification can only be carried out to a basic level, e.g., only ceramic glaze and /or paste.

Material with residues, chemicals, or elements potentially useful for future studies should be considered for retention (*if not a health risk!*).

For classes of materials that preclude specific identification, it is recommended that a percentage of each class be sampled, but the bulk excluded from curation. Curated sample size depends on decisions that consider physical characteristics, such as small size and/or extensive deterioration, which may preclude or severely limit further analysis, as well as practical considerations, such as excessive weight and/or size. In short, we recommend that sampling considerations strike a balance between the potential for further research and the practical limitations of curation space.

A representative sampling strategy may be applied to the retention of some typological classes of recovery. The following examples are not exhaustive, but may serve as a model for other recovery.

#### *Metals-*

- A representative sample of a typologically defined group of bulk finds from each provenience context should be retained, with the rest exempt from curation.
- Unidentifiable fragments and objects too unstable and corroded to be meaningfully identified or conserved should be not be curated.
- Structural or large industrial objects may be exempt from curation (or even collection), or sparingly sampled.

#### *Glass-*

- A representative sample of a generically defined group of bulk finds from each provenience context should be retained, with the rest exempt from curation (e.g., colorless, curved glass fragments without diagnostic attributes).
- Because general classification of glass fragments starts with color (though color may be subjective and can be influenced by a variety of factors),

other criteria (e.g., blown or hand finished vs. machine made) may be equally valid in the selecting samples.

- Highly redundant glass objects, even if diagnostic, are recommended to be representatively sampled (e.g., 19<sup>th</sup> century or later bottle base, side seams, unmarked body sherds, neck sherds, soda pop bottle fragments even if diagnostic to brand).

#### *Ceramics-*

- A representative sample of a generically defined group of bulk finds from each provenience context should be retained, with the rest exempt from curation (e.g., sand temper undecorated small to medium body sherds, or undecorated whiteware body sherds).
- A specialist review of bulk typological recovery is recommended to assure sufficient and representative samples of significant variations are curated.
- A specialist review of bulk samples assures identification and sorting of rims, bases or other diagnostic sherds, evidence of secondary use or other wear patterns, imported wares, recoverable residues, impressions such as finger-prints, etc., as some of those classes of sherds may be appropriate for 100% curation rather than reduction to representative samples.

#### *Lithics-*

- Lithic debitage is a common bulk find at some sites, especially quarry or lithic tool production sites. A representative sample of a generically defined group of bulk finds from each provenience context should be retained, but it depends on professional assessment whether some percentage can be exempt from curation.
- Redundancy is not always a determining factor to reduce a debitage sample prior to curation. Careful consideration should be made as to the recovery context and/or methodology in addition to the sample in yielding significant results.
- A specialist review of bulk typological recovery is recommended to assure sufficient and representative samples of significant variation are curated.
- A specialist review is recommended to assure identification of expedient use and/or retouched flake tools, geological variation in materials, and meaningful sample sizes for each sorted group of bulk recovery.
- Building construction related lithics (e.g., paving stone, slate roof fragments, etc.) may be bulky and appropriate for reduction to a relatively small sample.
- Coal, cinders, or clinkers if highly redundant can be reduced to a relatively small sample.

- Unmodified stone should not be curated unless exotic (e.g., “manuport”), and in some contexts (especially historic) abundant exotic stone (e.g., slate) should be sparingly sampled.

*Bone-*

- Bulk faunal bone samples should be sorted to a meaningful level. Reduction to representative samples may focus on totally unidentifiable fragments, depending on the potential for additional research.
- Some recovery strategies (e.g., minimal vertical control, large screen size) or highly disturbed field contexts clearly impact the potential for additional research, and reducing the amount of bone curated may not have a significant impact on future research.
- For sites where large amounts of bone recovery are anticipated and specialized study utilizing fine screen recovery is part of the planned analysis, collection strategy should be carefully considered in conjunction with curation needs. In this context, some prior decisions need to be made about the quantity of midden to excavate in order to gain a meaningful sample for faunal analysis, thus avoiding over-sampling.
- Faunal samples for future research may be appropriately transferred to another organization, per consultation with BAR.

*Shell-*

- When shell represents a significant percentage of matrix content, it may be necessary to reduce the amount of unmodified shell after analysis to samples.
- Bulk shell samples should be carefully sorted, analyzed, and reduced to smaller samples.
- Unanalyzed bulk shell samples will not be curated by BAR, and if deemed important for future research, transferred to another organization, per consultation with BAR.
- Building and construction materials, e.g., coquina, should be reduced to representative samples.

*Soils-*

- Retention of sediment columns, especially from older sites, may be important, but there is little agreement between specialists and curators concerning the quantities of soils and sediments to be retained, and methods and conditions of storage. In general, BAR does not curate bulk soil samples.
- If soils are collected, modest amounts are urged, and BAR may request that if they are deemed important for retention, the investigator rather than BAR provide curation.

*Other Materials-*

- Recovery may include a wider range of material classes than discussed above. The guidelines for the more common materials should provide a model for those not discussed. Basically, within an analytic provenience large samples of redundant types of a given material class should be considered for reduction to representative samples. This is especially the case if preservation conditions are so poor that only a generic identification is possible.
- Unanalyzed bulk samples of any class of materials should not be curated at BAR.

#### **IV) Handling Material Not Curated**

Materials or items exempt from curation are excluded from selling or personal use. The material must be dealt with in a professional and ethical manner. Note the following:

- Material not selected for curation and considered to lack research potential (e.g., modern plastic, cigarette filters, unmodified matrix pebbles, charcoal unsuitable for radiocarbon or other analysis, etc.) may be discarded in land-fill trash or buried on site (the latter, per consultation with BAR and land managing agency).
- Toxic items (e.g., asbestos) need to be disposed of properly and not simply added to normal trash.
- Unselected metal oxides and unrecognizable decomposed materials can be treated as trash.