

### **Suggested Reading**

Adkins, Lesley, and Roy Adkins

- 2009 **Archaeological Illustration**. Paperback ed. Cambridge Manuals in Archaeology. Cambridge University Press, Cambridge, United Kingdom.

ArchNet Web Site

- 2014 <http://ari.asu.edu/archnet/> [ArchNet is the “World Wide Web Virtual Library for Archaeology.” This site provides indexes, searches, and links to archaeological resources available on the Internet. ArchNet is hosted by the Archaeological Research Institute (ARI) at Arizona State University in Tempe. Currently, the web site is down, but the hosts promise it will reappear in the future.]

Balme, Jane, and Alistair Paterson (editors)

- 2014 **Archaeology in Practice: A Student Guide to Archaeological Analyses**. 2<sup>nd</sup> ed. Wiley-Blackwell, Malden, Massachusetts.

Banning, E. B.

- 2000 **The Archaeologist’s Laboratory: The Analysis of Archaeological Data**. Kluwer Academic/Plenum Publishers, New York. [reviews the theory, concepts and basic methods involved in archaeological analysis; has a glossary and index]

Dibble, Harold L., Curtis W. Marean, and Shannon P. McPherron

- 2007 The Use of Barcodes in Excavation Projects: Examples from Mossel Bay (South Africa) and Roc de Marsal (France). **The SAA Archaeological Record** 7(1):33–38.

Dillon, Brian D. (editor)

- 1985 **Student’s Guide to Archaeological Illustrating**. 2<sup>nd</sup> revised ed. Cotsen Institute of Archaeology at UCLA, Archaeological Research Tools 1. Los Angeles, California. [covers map-making, plans, profiles, artifacts, etc.]

- 1993 **Practical Archaeology: Field and Laboratory Techniques and Archaeological Logistics**. 3<sup>rd</sup> ed. Cotsen Institute of Archaeology at UCLA, Archaeological Research Tools 2. Los Angeles, California. [brief manual includes coverage of surveying & mapping techniques, and lab methods]

Drennan, Robert D.

- 2009 **Statistics for Archaeologists: A Commonsense Approach.** 2<sup>nd</sup> ed. Springer, New York. [covers a variety of quantitative methods and their practical application to data analysis]

Ewen, Charles R.

- 2003 **Artifacts.** Archaeologist's Toolkit Volume 4. Altamira Press, Lanham, Maryland. [how to prepare, protect, & analyze artifacts in the lab; outlines the principles of identification, classification, quantification, data manipulation, and analysis]

Fagan, Brian M.

- 2009 **In the Beginning: An Introduction to Archaeology.** 12<sup>th</sup> ed. Prentice Hall, Upper Saddle River, New Jersey.
- 2011 **Ancient Lives: An Introduction to Archaeology and Prehistory.** 5<sup>th</sup> ed. Prentice Hall, Upper Saddle River, NJ. [both of Fagan's text books have chapters on research and data analysis]

Ferguson, Jeffrey R. (editor)

- 2010 **Designing Experimental Research in Archaeology: Examining Technology through Production and Use.** University Press of Colorado, Boulder. [chapters on the replication of ceramic, lithic, bone, and other perishable artifacts]

Greene, Kevin, and Tom Moore

- 2010 **Archaeology: An Introduction.** 5<sup>th</sup> ed. Routledge, New York. [text book with a lab-related Chapter 5 on "Archaeological Science"]

Griffiths, Nick, and Anne Jenner, with Christine Wilson

- 2007 **Drawing Archaeological Finds: A Handbook.** Revised ed. Occasional Paper of the Institute of Archaeology, University College, London. Archetype Publications, London, England.

Howell, Carol L., and Warren Blanc

- 1995 **A Practical Guide to Archaeological Photography.** 2<sup>nd</sup> ed. UCLA Institute of Archaeology, Archaeological Research Tools 6. Los Angeles, California. [reviews equipment, field, and studio (lab) techniques]

Joukowsky, Martha

- 1980 **A Complete Manual of Field Archaeology.** Prentice Hall Press, New York. [see Chapter 10 (cataloguing) & Chapters 12–16 (analyses and illustration)]

Keller, Angela H.

- 2009 In Defense of the Database. **The SAA Archaeological Record** 9(5):26–32. [describes the purpose and advantages of developing archaeological databases in digital formats]

Maschner, Herbert D. G., and Christopher Chippindale (editors)

- 2005 **Handbook of Archaeological Methods.** AltaMira Press, Lanham, Maryland. [34 chapters include topics such as theoretical models, strategies for field work & lab analysis, curation, collaboration, funding, and publication]

Ortman, Scott G., Erin L. Baxter, Carole L. Graham, G. Robin Lyle, Lew W. Matis, Jamie A. Merewether, R. David Satterwhite, and Jonathan D. Till

- 2005 **The Crow Canyon Archaeological Center Laboratory Manual, Version 1.** Crow Canyon Archaeological Center, Cortez, CO. On-line at <http://www.crowcanyon.org/ResearchReports/LabManual/LaboratoryManual.pdf>. [documents current practices of the Crow Canyon research lab in southwestern Colorado; especially detailed on pottery analysis and classification]

Orton, Clive

- 2000 **Sampling in Archaeology.** Cambridge Manuals in Archaeology. Cambridge University Press, New York. [useful overview that covers the application of statistical sampling theory at a range of scales, from the regional to the microscopic]

Peregrine, Peter N.

- 2015 **Archaeological Research: A Brief Introduction.** 2<sup>nd</sup> ed. Left Coast Press, Walnut Creek, California.

Read, Dwight W.

- 2007 **Artifact Classification: A Conceptual and Methodological Approach.** Left Coast Press, Walnut Creek, California. [compares various pottery typologies, and follows with a suggested classification methodology applicable to any artifact class]

Rice, Patricia C.

- 1998 **Doing Archaeology: A Hands-On Laboratory Manual.** Mayfield Publishing Co., Mountain View, CA. [workbook has 13 exercises to work with real data and archaeological materials]

Sease, Catherine

- 1994 **A Conservation Manual for the Field Archaeologist.** 3<sup>rd</sup> ed. UCLA Institute of Archaeology, Archaeological Research Tools 4. Los Angeles, California. [covers methods and materials, correct handling, packing, and storage techniques, safety procedures, molding and impression techniques, and chemical solution preparation]

Steiner, Melanie (editor)

- 2006 **Approaches to Archaeological Illustration: A Handbook.** Practical Handbook No. 18. Council for British Archaeology, York, England.

Sullivan, Lynne P., and S. Terry Childs

- 2003 **Curating Archaeological Collections: From the Field to the Repository.** Archaeologist's Toolkit Volume 6. Altamira Press, Lanham, Maryland. [how to manage a collection, what to do with field notes & other project documents, how to find a repository, how to adjust field practices so that the process runs smoothly]

Sutton, Mark Q., and Brooke S. Arkush

- 2009 **Archaeological Laboratory Methods: An Introduction.** 5<sup>th</sup> ed. Kendall Hunt Publishing Co., Dubuque, Iowa. [handbook introduces the novice to analysis of archaeological remains]

## Glossary

[3/2007]

**Accessioning:** to record as acquired; museums and other repositories accession artifacts into their collection system, which includes assigning an accession number.

**Acryloid B-72:** a poly-methyl methacrylate dissolved in a solvent for use as an adhesive to repair/stabilize artifacts, and as a background or overcoat for labels on artifacts.

**Azimuth:** the horizontal angular distance from a fixed reference direction to another position. Surface artifact positions are often expressed in terms of distance and direction (azimuth, in degrees 1°–360°) from a mapping station/datum, and such data as recorded on artifact bags must be preserved in the laboratory.

**Catalog:** a systematized list in numerical or alphabetical order, often with descriptions of the listed items. Cataloguing in a lab involves organizing field & lab analysis information, and transferring this to a log sheet/data base. A catalog number is assigned to each collected item, which may or may not match the accession number (see above).

**Comparative study:** analyses of artifact/feature use, location, technology, morphology, etc. that involve study of similarities and differences in spatial (site, region) or cultural terms.

**Complex repair:** putting together many fragments of a single artifact, such as reconstructing a complete ceramic vessel.

**Conservation:** work on fragile and/or broken artifacts and features performed by trained “Conservators” who evaluate the context, uniqueness, condition and information potential of the item before taking any action.

**Curation:** the care and management of collections, as in a museum; federal standards for curation are detailed in 36 CFR Part 79.

**Debitage:** waste by-products (“flakes”) resulting from stone tool manufacture, one of the most abundant artifact classes handled in the typical lab.

**Diagnostic:** used in a diagnosis, such as an artifact style (e.g., a type of projectile point) indicative of a time period or an archaeological culture.

**Dry cleaning:** lab procedure for artifacts too fragile to withstand washing/scrubbing; such items are cleaned without the use of a liquid such as water or soap.

**Ethnographic analogy:** drawing conclusions about the ancient use or patterning of artifacts and/or features based on “ethnographies” or studies of living cultures.

**Field specimen:** any artifact or sample collected from an archaeological site; in many systems, each collected item is assigned an F.S. number—one version of a field catalog.

**Friable:** describes a material that is brittle; readily crumbled.

**Fugitive color:** a non-permanent pigment applied to an artifact such as pottery painted red *after* firing; must be carefully handled in the laboratory.

**Function:** the original and/or last use of an artifact; may not fit one’s expectations given the morphology of an item. For example, an item that looks like (*morphology*) a projectile point may have been used as a knife. In addition to morphological data, attempts to determine function focus on an artifact’s context in the field, residue IDs, use wear analysis, and breakage patterns.

**In situ:** literally, in place; archaeologists’ way of describing the exact place of discovery of an artifact in the field, as opposed to those items recovered displaced during screening or sieving of deposits.

**Inventory:** a thorough accounting of all collections at the end of a field season, matching field catalog information to artifact bag/box labels; the inventory may occur prior to transport to the lab, and/or as part of the receiving stage at the lab.

**Lab Director:** supervisor of all phases of lab work for a project; may or may not be the same individual who supervised field work. Minimum qualifications are a B.A. degree in Anthropology/Archaeology or a related field and 10+ months of experience.

**Lithics:** artifacts of flaked, ground/pecked or carved stone commonly part of collected assemblages in Colorado.

**Microfoam:** conservation-grade, non-acid plastic foam sheeting commonly used for packaging and padding of artifacts being prepared for storage or display. May deteriorate after 12–15 years.

**Morphology:** the study of form and structure; morphological analyses focus on details of the size, shape, manufacturing patterns, decoration, etc. of artifacts and features.

**Non-ionic surfactant:** cleansers with non-clotting chemical property, preferable for washing artifacts when water alone is insufficient.

**Permeable:** a material capable of being penetrated, such as bone artifacts soaking up water; only non-permeable artifacts should be washed with water in a lab.

**Provenience:** the position of an archaeological find in time and space, recorded three-dimensionally; provenience data must be retained for each item throughout a project's lab phase.

**Receiving:** initial step in the lab when materials arrive from the field; involves making an inventory of incoming collections, matched against the field catalog.

**Repository:** a public facility where materials are stored for future study, such as a museum.

**Research design:** a planning document prepared before fieldwork that provides a project focus through all stages of work including the laboratory phase.

**Restoration:** process of reconstructing a broken artifact by working both with genuine fragments and by adding filler to missing areas to complete its original form.

**Routing:** specific path along which an item is sent throughout the lab phase; routing decisions are based on such circumstances as whether or not the item can be washed, its conservation requirements, if an outside consultant is needed for analysis, etc.

**Simple repair:** rejoining broken artifacts in cases where only two or a few fragments are involved, i.e., in cases when the expertise of a conservator may not be needed.

**Sorting:** separation of collections into sub-groups. A primary rough sort occurs in receiving when items are grouped by material and sent to the appropriate processing/treatment station; a second sort occurs in cleaning when items needing special handling are separated from washable artifacts; a third sorting involves analysis when materials to be sent to consultants are segregated from those to be examined in-house, etc.

**Synthesis:** the combining of separate ideas or information to form a coherent whole, such as synthesizing field and lab analysis data for a final project report.

**Tool class:** an artifact category within a single material based primarily on function such as knife, projectile point, scraper, awl, bowl, etc.

**Tool type:** an artifact category within a single class based primarily on style such as corner-tanged knife, two-hand mano, spurred end scraper, etc.