

Reading & Reference List

	<u>Page</u>
A. General Reading List.....	2
B. General Conservation Bibliography	5
C. References on Specific Materials and Problems	
1. Artwork.....	10
2. Basketry, Sandals, etc.....	10
3. Bone, Antler, etc.	12
4. Ceramics and Glass	16
5. Cordage and Textiles	17
6. Leather, Skin, Fur	19
7. Lighting.....	20
8. Metals	21
9. Paper.....	22
10. Pests.....	22
11. Stabilizers.....	23
12. Wood.....	23
D. Ethnographic Uses and Plant Identification	24
E. Useful Web Sites.....	35
Handout 2. Glossary	35

General Reading List

Benedict, Audrey DeLella

- 2008 **The Naturalist's Guide to the Southern Rockies: Colorado, Southern Wyoming, and Northern New Mexico.** Fulcrum Publishing, Golden, Colorado.

Benedict, James B.

- 2007a Effects of Climate on Plant-Food Availability at High Altitude in the Colorado Front Range, U.S.A. **Journal of Ethnobiology** 27(2):143–173.
- 2007b **Wild-Plant Foods of the Alpine Tundra and Subalpine Forest, Colorado Front Range.** Research Report No. 9, Center for Mountain Archeology, Ward, Colorado.

Betancourt, Julio L., Thomas R. Van Devender, and Paul S. Martin (editors)

- 1990 **Packrat Middens: The Last 40,000 Years of Biotic Change.** The University of Arizona Press, Tucson.

Blackburn, Fred M., and Ray A. Williamson

- 1997 **Cowboys & Cave Dwellers: Basketmaker Archaeology in Utah's Grand Gulch.** School of American Research Press, Santa Fe, New Mexico.

Cattanach, George S.

- 1980 **Long House.** National Park Service, Publications in Archeology 7H. Washington, D.C.

Dincauze, Dena F.

- 2000 **Environmental Archaeology: Principles and Practice.** Cambridge University Press, New York.

Drooker, Penelope Ballard (editor)

- 2001 **Fleeting Identities: Perishable Material Culture in Archaeological Research.** Occasional Papers No. 28. Center for Archaeological Investigations, Southern Illinois University, Carbondale.

Dunmire, William W., and Gail D. Tierney

- 1997 **Wild Plants and Native Peoples of the Four Corners.** Museum of New Mexico Press, Santa Fe.

Elias, Scott A.

1994 **Quaternary Insects and Their Environments.** Smithsonian Institution Press, Herndon, Virginia.

Emslie, Steven D., Mark Stiger, and Ellen Wambach

2005 Packrat Middens and Late Holocene Environmental Change in Southwestern Colorado. **The Southwestern Naturalist** 50:209–215.

Fitzgerald, James P., Carron A. Meaney, and David M. Armstrong

1995 **Mammals of Colorado.** University Press of Colorado, Boulder.

Hodges, Henry

2006 **Artifacts: An Introduction to Early Materials and Technology.** New ed. Duckworth Publishers, London, UK.

Koch, Ronald Peter

1990 **Dress Clothing of the Plains Indians.** Civilization of the American Indian Series, Vol. 140. University of Oklahoma Press, Norman.

Lambert, Joseph B.

1997 **Traces of the Past: Unraveling the Secrets of Archaeology Through Chemistry.** Helix Books, Perseus Publishing, Reading, Massachusetts.

Martin, Gary J.

2004 **Ethnobotany: A Methods Manual.** People and Plants International Conservation Series. Routledge, London, UK.

McQuiston, Don, and Debra McQuiston

1995 **Dolls & Toys of Native America: A Journey Through Childhood.** Chronicle Books, San Francisco, California.

Miller, Heather Margaret-Louise

2006 **Archaeological Approaches to Technology.** Academic Press, San Diego.

Morris, Elizabeth Ann

1980 **Basketmaker Caves in the Prayer Rock District, Northeastern Arizona.** Anthropological Papers of the University of Arizona No. 35, Tucson.

Mutel, Cornelia Fleischer, and John C. Emerick

- 1992 **From Grassland to Glacier : The Natural History of Colorado and the Surrounding Region.** 2nd ed. Johnson Books, Boulder, Colorado.

Nickens, Paul R.

- 1981 **Pueblo III Communities in Transition: Environment and Adaptation in Johnson Canyon.** Memoirs of the Colorado Archaeological Society, No. 2. Boulder, Colorado.

Nordenskiöld, Gustaf

- 1990 **The Cliff Dwellers of the Mesa Verde.** Reprint of the 1893 edition. Mesa Verde Museum Association, Inc., Mesa Verde National Park, Colorado.

Pearsall, Deborah M.

- 2015 **Paleoethnobotany: A Handbook of Procedures.** 3rd ed. Left Coast Press, Walnut Creek, California.

Reitz, Elizabeth J., and Myra Shackley

- 2012 **Environmental Archaeology.** Manuals in Archaeological Method, Theory and Technique. Springer, New York.

Reitz, Elizabeth J., and Elizabeth S. Wing

- 2008 **Zooarchaeology.** 2nd ed. Cambridge Manuals in Archaeology. Cambridge University Press, New York.

Sobolik, Kristin D.

- 2003 **Archaeobiology.** Archaeologist's Toolkit Volume 5. Altamira Press, Lanham, Maryland.

Tanner, Clara Lee

- 1976 **Prehistoric Southwestern Craft Arts.** University of Arizona Press, Tucson.

Torrence, Robin, and Huw Barton (editors)

- 2005 **Ancient Starch Research.** Left Coast Press, Walnut Creek, California.

Tryon, Christian A.

- 2006 The Destructive Potential of Earthworms on the Archaeobotanical Record. **Journal of Field Archaeology** 31(2):199–202.

Walters, Anna Lee

- 1989 **The Spirit of Native America: Beauty and Mysticism in American Indian Art.** Chronicle Books, San Francisco, California.

Warnock, John, and Marva Warnock

- 2009 **Splendid Heritage: Perspectives on American Indian Arts.** Edited by Clinton Nagy. University of Utah Press, Salt Lake City.

Wescott, David (editor)

- 1999 **Primitive Technology: A Book of Earth Skills.** The Society of Primitive Technology. Gibbs-Smith Publisher, Salt Lake City, Utah.

Wheat, Margaret M.

- 1967 **Survival Arts of the Primitive Paiutes.** University of Nevada Press, Reno.

Whitson, Tom D. (editor)

- 2006 **Weeds of the West.** 9th ed. Diane Publishing Co., Darby, Pennsylvania.

General Conservation Bibliography

AATA On-Line

- 2015 **Abstracts of International Conservation Literature.** [a free searchable database on the preservation and conservation of material culture; <http://aata.getty.edu/Home>]

Barazani, Gail Coningsby

- 1978 **Safe Practices in the Arts & Crafts: A Studio Guide.** College Art Association of America, New York.

Bourque, Bruce J., Stephen W. Brooke, Ronald Kley, and Kenneth Morris

- 1980 Conservation in Archaeology: Moving Toward Closer Cooperation. **American Antiquity** 45(4):794–799.

Brothwell, Don R., and Eric Higgs (editors)

- 1970 **Science in Archaeology.** Basic Books, Inc., New York.

Carman, Michael

- 1978 Conservation Publications for Small Museums. **Curator** 21(4).

de Torres, Amparo R. (editor)

1990 **Collections Care: A Selected Bibliography.** National Institute for the Conservation of Cultural Property, Washington, D.C.

Edson, Gary, and David Dean

1996 **The Handbook for Museums.** Routledge, London, UK.

Ford, Richard

1977 **Systematic Research Collections in Anthropology, an Irreplaceable National Resource.** Report of a Conference Sponsored by the Council for Museum Anthropology. Peabody Museum, Cambridge, Massachusetts.

Gardner, Joan S.

1980 **The Conservation of Fragile Specimens from the Spiro Mound, Le Flore County, Oklahoma.** Contributions from the Stovall Museum, University of Oklahoma, No. 5. Norman, Oklahoma.

Gettens, Rutherford J., and George L. Stout

1966 **Painting Materials: A Short Encyclopedia.** New ed. Dover Publications, New York.

Goodyear, Frank H.

1971 **Archaeological Site Science.** American Elsevier Publishing, New York.

Guldbeck, Per E.

1985 **The Care of Antiques and Historical Collections.** 2nd ed, revised by A. Bruce MacLeish. American Association for State and Local History, Nashville, Tennessee.

Hodges, Henry W. M. (senior editor)

1987 **In Situ Archaeological Conservation: Proceedings of Meetings April 6–13, 1986, Mexico.** J. Paul Getty Trust, Century City, California.

Howie, F.

1978 Storage Environment and the Conservation of Geological Material. **The Conservator** 2:13–19. London, UK.

International Institute for Conservation Congress

1975 **Conservation in Archeology and the Applied Arts.** IIC Stockholm Conference Proceedings. International Institute for Conservation Congress, London, UK.

Johnson, E. Verner, and J. Horgan

- 1979 **Handbook for Museum Collection Storage.** UNESCO, Division of Cultural Heritage, Paris, France.

Kenworthy, Mary Anne

- 1985 **Preserving Field Records: Archival Techniques for Archaeologists and Anthropologists.** University Museum Publications. University of Pennsylvania Press, Philadelphia.

Lewis, Ralph H.

- 2005 **Manual for Museums.** Produced for the National Park Service, Washington, D.C. University Press of the Pacific, Honolulu, Hawaii.

Lindsey, Alexander J.

- 1979 **The Curation and Management of Archeological Collections: A Pilot Study.** American Anthropological Association, Washington, D.C.

Macleod, K. J.

- 1975 **Relative Humidity: Its Importance, Measurement and Control in Museums.** Canadian Conservation Institute (CCI), Technical Bulletin No. 1, Ottawa, Canada.

Marquardt, William H., Anta Montet-White, and Sandra C. Scholtz

- 1982 Resolving the Crisis in Archeological Collections Curation. **American Antiquity** 47(2):409–418.

Morris, Kenneth

- 1980–1981 Conservation of Archaeological Collections. **North American Archaeologist** 2(2).

Odegaard, Nancy

- 1992 **A Guide to Handling Anthropological Museum Collections.** Western Association for Art Conservation, Tucson, Arizona.

Organ, Robert M.

- 1968 **Design for Scientific Conservation of Antiquities.** Butterworth & Co. Ltd., London, UK.

Pascoe, Michael

- 1980 Toxic Hazards from Solvents in Conservation. **The Conservator** 4:25–428.

- Plenderleith, H. J., and A. E. A. Werner
1972 **The Conservation of Antiquities and Works of Art.** 2nd ed. Oxford University Press, London, UK.
- Rodgers, Bradley A.
2004 **The Archaeologist's Manual for Conservation: A Guide to Non-Toxic, Minimal Intervention Artifact Stabilization.** Kluwer Academic/Plenum Publishers, New York.
- Rose, Carolyn
1974 Notes on Archeological Conservation. **Bulletin of the American Institute for Conservation**, pp. 123–130.

1977 An Introduction to Museum Conservation. **American Indian Art Magazine**, Winter issue.
- Sanford, Elizabeth
1975 Conservation of Artifacts: A Question of Survival. **Historical Archaeology** 9:55–64.
- Schultz, Arthur W. (general editor)
1992 **Caring for Your Collections.** National Institute for the Conservation of Cultural Property. Harry N. Abrams, Inc., New York.
- Sease, Catherine
1994 **A Conservation Manual for the Field Archaeologist.** 3rd ed. UCLA Cotsen Institute of Archaeology, Archaeological Research Tools #4, Los Angeles, California.
- Singley, Katherine R.
1981a Caring for Artifacts After Excavation: Some Advice for Archaeologists. **Historical Archaeology** 15(1):35–48.

1981b CASH: Conservation of Artifacts, Storage and Handling. Paper presented at the annual meeting of the Society for Historic Archaeology, New Orleans, Louisiana.
- Thompson, John M. A. (editor)
1992 **Manual of Curatorship: A Guide to Museum Practice.** 2nd ed. Butterworth-Heinemann, Woburn, Massachusetts.

Thomson, Garry

1986 **The Museum Environment.** 2nd ed. Butterworth-Heinemann, Woburn, Massachusetts.

Timar-Balazsy, Agnes, and Dinah Eastop (editors)

1997 **International Perspectives on Textile Conservation.** Archetype Publications, London, UK.

U.N.E.S.C.O.

1975 **The Conservation of Cultural Property.** Museums and Monuments series #XI. UNESCO Press, Paris, France.

1981 **“Appropriate Technologies” in the Conservation of Cultural Property.** Technical Handbooks for Museums and Monuments No 7. UNESCO Press, Paris, France.

Watkinson, David

1998 **First Aid for Finds.** 3rd ed. Rescue Publication No. 1. Archaeology Section of the United Kingdom Institute for Conservation, with the Museum of London, London, UK.

Williams, Stephen L., Renè Laubach, and Hugh H. Genoways

1977 **A Guide to the Management of Recent Mammal Collections.** Carnegie Museum of Natural History, Special Publication No. 4. Pittsburgh, Pennsylvania.

Conservation Periodicals: The International Institute for Conservation of Historic and Artistic Works (IIC) & its affiliated institutions publish several conservation periodicals: “Art and Archaeology Technical Abstracts” (IIC, London & New York); “Bulletin” of the American Group (IIC, New York); “The Conservator” of the United Kingdom Group (IIC, London); “Studies in Conservation” of the International Group (IIC, London); and “Technology and Conservation” (Technology Organization, Inc., Boston). Also Notable: “Field Notes” for archaeological conservation, compiled by the Conservation Division of the Dept. of National Parks and Historic Sites, Ottawa, Canada. **The web site** <http://www.cci-icc.gc.ca/index-eng.aspx> also has useful data.

References on Specific Materials and Problems

Artwork

Cather, Sharon (editor)

- 1991 **The Conservation of Wall Paintings: Proceedings of a Symposium Organized by the Courtauld Institute and the Getty Conservation Institute, London, July 13–16, 1987.** Getty Trust Publications. Getty Conservation Institute, Los Angeles, California.

Keck, Caroline K.

- 1978 **How to Take Care of Your Paintings: The Art Owner's Guide to Preservation and Restoration.** Charles Scribner's Sons, New York.
- 1980 **A Handbook on the Care of Paintings.** American Association for State and Local History, Nashville, Tennessee.

Museum of Fine Arts, Research Laboratory Staff

- 1965 **Application of Science in Examination of Works of Art.** Proceedings of the seminar conducted by the Research Lab of the Museum of Fine Arts, Boston.

Rowlison, Eric B.

- 1975 Rules for Handling Works of Art. **Museum News**, April, pp. 10–13.

Silver, Constance S.

- 1980 **The State of Preservation of Pueblo Indian Mural Paintings in the American Southwest.** International Center for the Study of the Preservation and the Restoration of Cultural Property.

Stowlow, Nathan

- 1979 **Conservation Standards for Works of Art in Transit & on Exhibition.** Museums and Monuments series #XVII. UNESCO, Paris, France.

Basketry, Sandals, Etc.

Adovasio, James M.

- 1974 Prehistoric North American Basketry. *In*: Collected Papers on Aboriginal Basketry, edited by Donald R. Tuohy and Doris L. Rendall, pp. 98–148. **Nevada State Museum Anthropological Papers** No. 16. Carson City, Nevada.

Adovasio, James M.

1980 Prehistoric Basketry of Western North America and Mexico. *In: Early Native Americans: Prehistoric Demography, Economy and Technology*, edited by D.L. Browman, pp. 341–362. Mouton, The Hague.

2010 **Basketry Technology: A Guide to Identification and Analysis**. Updated ed. Left Coast Press, Walnut Creek, California.

Adovasio, James M., David R. Pedler, and Jeff S. Illingworth

2002 Fremont Basketry. **Utah Archaeology** 15(1):5–26.

Canadian Conservation Institute (CCI)

2010 **Care of Basketry**. Rev. ed. CCI Notes on Ethnographic Materials No. 6/2. Ottawa, Canada.

Deegan, Ann Cordy

1996 Anasazi Square Toe-Square Heel Twined Sandals: Construction and Cultural Attributes. **Kiva** 62(1):27–44.

Geib, Phil R.

1996 AMS Dating of Plain-Weave Sandals from the Central Colorado Plateau. **Utah Archaeology** 9(1):35–53.

Geib, Phil R., and Edward A. Jolie

2008 The Role of Basketry in Early Holocene Small Seed Exploitation: Implications of a Ca. 9,000 Year-Old Basket from Cowboy Cave, Utah. **American Antiquity** 73(1):83–102.

Hays-Gilpin, Kelley Ann, Ann Cordy Deegan, and Elizabeth Ann Morris

1998 **Prehistoric Sandals from Northeastern Arizona: The Earl H. Morris and Ann Axtell Morris Research**. Anthropological Papers of the University of Arizona No. 62. Tucson, Arizona.

Jolie, Edward A.

2006 The Technomechanics of Plains Indian Coiled Gambling Baskets. **Plains Anthropologist** 51(197):17–49.

- Morris, Earl H., and Robert F. Burgh
 1941 Anasazi Basketry: Basket Maker II Through Pueblo III, A Study Based on Specimens from the San Juan River Country. **Carnegie Institution of Washington, Publication** 533:1–66. Washington, D.C.
- Webster, Laurie D., and Kelley A. Hays-Gilpin
 1994 New Trails for Old Shoes: Sandals, Textiles, and Baskets in Basketmaker Culture. **Kiva** 60(2):313–327.
- Whiteford, Andrew Hunter
 1988 **Southwestern Indian Baskets: Their History and Their Makers.** School of American Research Press, Santa Fe, New Mexico.
- Withers, Malcolm
 1976 Conservation of Basketry in the Southwest. *In: Collected Papers in Honor of Marjorie Ferguson Lambert.* Papers of the Archaeological Society of New Mexico, No. 3.
- Wyckoff, Lydia L. (editor)
 2001 **Woven Worlds: Basketry from the Clark Field Collection.** Philbrook Museum of Art, Tulsa, Oklahoma.
- Bone, Antler, Shell, Etc.*
- Bass, William M.
 2005 **Human Osteology: A Laboratory and Field Manual.** 5th revised ed. Special Publication No. 2. Missouri Archaeological Society, Columbia.
- Bennett, Joanne L.
 1999 Thermal Alteration of Buried Bone. **Journal of Archaeological Science** 26(1):1–8.
- Binford, Lewis R.
 1981 **Bones: Ancient Men and Modern Myths.** Academic Press, New York.
- Bonnichsen, Robson, and Marcella H. Sorg (editors)
 1989 **Bone Modification.** Center for the Study of the First Americans, University of Maine, Orono.

- Brothwell, Don R.
1981 **Digging Up Bones.** 3rd ed. Cornell University Press, Ithaca, New York.
- Buikstra, Jane E., and Douglas H. Ubelaker (editors)
1994 **Standards for Data Collection from Human Skeletal Remains: Proceedings of a Seminar at the Field Museum of Natural History.** Research Series No. 44. Arkansas Archeological Survey, Fayetteville.
- Chaplin, Raymond Edwin
1971 **The Study of Animal Bones from Archaeological Sites.** Seminar Press, New York.
- Claassen, Cheryl
1998 **Shells.** Cambridge Manuals in Archaeology. Cambridge University Press, Cambridge, United Kingdom.
- Davis, Simon J. M.
1995 **The Archaeology of Animals.** Yale University Press, New Haven, Connecticut.
- France, Diane L.
2009 **Human and Nonhuman Bone Identification: A Color Atlas.** CRC Press, Boca Raton, Florida.

2011 **Human and Nonhuman Bone Identification: A Concise Field Guide.** CRC Press, Boca Raton, Florida.
- Gejvall, Nils-Gustaf
1970 Cremations. *In: Science in Archaeology*, edited by Don R. Brothwell and Eric Higgs, pp. 468–479. Revised ed. Praeger Publishers, New York.
- Gilbert, B. Miles
2003 **Mammalian Osteology.** Reprint ed. Special Publications Series #3. Missouri Archaeological Society, Springfield.
- Gilbert, B. Miles, Larry D. Martin, and Howard G. Savage
1985 **Avian Osteology.** B. Miles Gilbert, Flagstaff, Arizona.

Gill, George W.

- 2010 Advances in Northwestern Plains and Rocky Mountain Bioarchaeology and Skeletal Biology. *In: Prehistoric Hunter-Gatherers of the High Plains and Rockies*, by Marcel Kornfeld, George C. Frison, and Mary Lou Larson, pp. 531–552. 3rd ed. Left Coast Press, Walnut Creek, California.

Hillson, Simon

- 1992 **Mammal Bones and Teeth: An Introductory Guide to Methods of Identification.** Left Coast Press, Walnut Creek, California.
- 2005 **Teeth.** 2nd ed. Cambridge Manuals in Archaeology. Cambridge University Press, England.

Klein, Richard G., and Kathryn Cruz-Uribe

- 1984 **The Analysis of Animal Bones from Archeological Sites.** Prehistoric Archeology and Ecology series. University of Chicago Press, Chicago, Illinois.

Lyman, R. Lee

- 1994 **Vertebrate Taphonomy.** Cambridge Manuals in Archaeology. Cambridge University Press, Cambridge, United Kingdom.

Lyman, R. Lee, and Kenneth P. Cannon (editors)

- 2004 **Zooarchaeology and Conservation Biology.** University of Utah Press, Salt Lake City.

Matisoo-Smith, Elizabeth, and K. Ann Horsburgh

- 2012 **DNA for Archaeologists.** Left Coast Press, Walnut Creek, California.

Mays, Simon

- 2010 **The Archaeology of Human Bones.** 2nd ed. Routledge, New York.

Milliken Randall T., and Al W. Schwitalla

- 2012 **California and Great Basin Olivella Shell Bead Guide.** Left Coast Press, Walnut Creek, California.

O'Connor, Sonia, Caroline Solazzo, and Matthew Collins

- 2014 Advances in Identifying Archaeological Traces of Horn and Other Keratinous Hard Tissues. **Studies in Conservation.** Electronic document, <http://www.maneyonline.com/doi/abs/10.1179/2047058414Y.0000000134>, accessed October 7, 2015.

Olsen, Stanley J.

- 1964 **Mammal Remains from Archaeological Sites: Southeastern and Southwestern United States.** Papers of the Peabody Museum of Archaeology and Ethnology 56(1). Peabody Museum Press, Cambridge, Massachusetts.
- 1968 **Fish, Amphibian and Reptile Remains from Archaeological Sites: Southeastern and Southwestern United States.** Papers of the Peabody Museum of Archaeology and Ethnology 56(2). Peabody Museum Press, Cambridge, Massachusetts.
- 1979 **Osteology for the Archaeologist.** Papers of the Peabody Museum of Archaeology and Ethnology 56(3–5). Peabody Museum Press, Cambridge, Massachusetts.

Price, T. Douglas (editor)

- 1989 **The Chemistry of Prehistoric Human Bone.** School of American Research Advanced Seminar Series. Cambridge University Press, New York.

Purdue, James R., Walter E. Klippel, and Bonnie W. Styles (editors)

- 1991 **Beamers, Bobwhites, and Blue-Points: Tributes to the Career of Paul W. Parmalee.** Illinois State Museum Scientific Papers, Vol. XXIII and the University of Tennessee, Department of Anthropology Report of Investigations No. 52. Springfield, Illinois.

Rixon, A. E.

- 1976 **Fossil Animal Remains: Their Preservation and Conservation.** Athlone Press, London, United Kingdom.

Searfoss, Glenn

- 1995 **Skull and Bones: A Guide to the Skeletal Structures and Behavior of North American Mammals.** Stackpole Books, Mechanicsburg, Pennsylvania.

Shipman, Pat, Giraud Foster, and Margaret J. Schoeninger

- 1984 Burnt Bones and Teeth: An Experimental Study of Color, Morphology, Crystal Structure and Shrinkage. **Journal of Archaeological Science** 11(4):307–325.

Stone, Tom

- 2010 **Care of Ivory, Bone, Horn and Antler.** Rev. ed. CCI Notes on Ethnographic Materials No. 6/1. Ottawa, Canada.

Ubelaker, Douglas H.

- 2008 **Human Skeletal Remains: Excavation, Analysis, Interpretation.** Illustrated ed., originally published 1978. Aldine Transaction, New Brunswick, New Jersey.

von den Driesch, Angela

- 1976 **A Guide to the Measurement of Animal Bones from Archaeological Sites.** Peabody Museum Bulletin No. 1. Harvard University, Cambridge, Massachusetts.

White, Tim D., Michael T. Black, and Pieter A. Folkens

- 2011 **Human Osteology.** 3rd ed. Elsevier Academic Press, San Diego, California.

White, Tim D., and Pieter Arend Folkens

- 2005 **The Human Bone Manual.** Elsevier Academic Press, San Diego, California.

Ceramics & Glass

Gibson, Bethune M.

- 1971 Methods of Removing Black and White Deposits from Ancient Pottery. **Studies in Conservation** 16(1):18–23.

Larney, Judith

- 1978 **Restoring Ceramics.** 2nd rev. ed. Barrie and Jenkins, London, UK.

Mibach, E. T. G.

- 1975 The Restoration of Coarse Archaeological Ceramics. *In: Conservation in Archaeology and the Applied Arts*, pp. 55–65. Papers from the International Congress of the International Institute for Conservation of Historic and Artistic Works (I.I.C.), Stockholm, Sweden.

Newton, Charlotte, and Judy Logan

- 2007 **Care of Ceramics and Glass.** Rev. ed. CCI Notes on Ceramics and Glass No. 5/1. Ottawa, Canada.

Norman, Jane

1978 Conserving Southwestern Pottery. **American Indian Art Magazine** 3(3).

Shepard, Anna O.

1985 **Ceramics for the Archaeologist**. Reprint ed. Carnegie Institution of Washington Publication 609, Washington, D.C.

Tennent, Norman H. (editor)

1999 **The Conservation of Glass and Ceramics: Research, Practice and Training**. James & James Ltd., London, United Kingdom.

Cordage and Textiles

American Home Economics Association Staff

1974 **Textile Handbook**. 5th ed. American Home Economics Association, Washington, D.C.

Canadian Conservation Institute Textile Lab Staff

2008 **Velcro Support System for Textiles**. Rev. ed. CCI Notes on Textiles and Fibres No. 13/4. Ottawa, Canada.

Drooker, Penelope Ballard, and Laurie D. Webster (editors)

2000 **Beyond Cloth and Cordage: Archaeological Textile Research in the Americas**. University of Utah Press, Salt Lake City.

Emery, Irene

1980 **The Primary Structures of Fabrics: An Illustrated Classification**. Reprint of 1966 edition. The Textile Museum, Washington, D.C.

Fikioris, Margaret

1976 Remounting Framed Textiles. **Museum News** 55(2).

Finch, Karen, and Greta Putnam

1991 **The Care and Preservation of Textiles**. Reprint ed. Lacis Publications, Berkeley, California.

Gardner, Joan S.

1979 Pre-Columbian Textiles from Ecuador: Conservation Procedures and Preliminary Study. **Technology and Conservation** 4(1).

- Good, Irene
 2001 Archaeological Textiles: A Review of Current Research. **Annual Review of Anthropology** 30:209–226.
- Haas, William Randall, Jr.
 2001 The Basketmaker II Fiber Industry of Boomerang Shelter, Southeastern Utah: A Synthesis of Cordage Morphology Analysis and Experimentation. **Kiva** 67(2):167–185.
- Hurley, William M.
 1979 **Prehistoric Cordage**. Aldine Manuals on Archeology No. 3. Taraxacum Inc., Washington, D.C.
- Kent, Kate Peck
 1983 **Prehistoric Textiles of the Southwest**. School of American Research, University of New Mexico Press, Albuquerque.
- Landi, Sheila
 1998 **The Textile Conservator's Manual**. 2nd ed. Butterworth-Heinemann Series in Conservation and Museology. Butterworth-Heinemann, Woburn, Massachusetts.
- Leene, Jentina E. (editor)
 1972 **Textile Conservation**. Smithsonian Institution Press, Washington, D.C.
- Merrimack Valley Textile Conservation Center (MVTCC)
 1979 **Textile Conservation Center Notes**. MVTCC Publications Dept., North Andover, Massachusetts.
- Petersen, James B. (editor)
 1996 **A Most Indispensable Art: Native Fiber Industries from Eastern North America**. University of Tennessee Press, Knoxville.
- Rice, James
 1963 Classification of Fibers Found in Ancient Textiles. Principles of Textile Conservation Science III. **Textile Museum Journal** 1(2).
 1964 The Characteristics of Soils and Stains Encountered on Historic Textiles. Principles of Textile Conservation Science V. **Textile Museum Journal** 1(3).

Rice, James

- 1966a The Wonders of Wetcleaning. Principles of Textile Conservation Science VI. **Textile Museum Journal** 2(1).
- 1966b The Characteristics of Detergents for Cleaning Historic Textiles. Principles of Textile Conservation Science VII. **Textile Museum Journal** 2(1).
- 1969a Requirements for Bulk Storage Protection Against Insect Damage. Principles of Textile Conservation Science XI. **Textile Museum Journal** 2(4).
- 1969b Adhesives for Textile Conservation. Principles of Textile Conservation Science XII. **Textile Museum Journal** 2(4).

Seiler-Baldinger, Annemarie

- 1995 **Textiles: A Classification of Techniques**. Smithsonian Institution Press, Washington, D.C.

Teague, Lynn S.

- 1998 **Textiles in Southwestern Prehistory**. University of New Mexico Press, Albuquerque.

Timar-Balazsy, Agnes, and Dinah Eastop

- 1998 **Chemical Principles of Textile Conservation**. Butterworth-Heinemann Series in Conservation and Museology. Butterworth-Heinemann, Woburn, Massachusetts.

Wheat, Joe Ben

- 2003 **Blanket Weaving in the Southwest**, edited by Ann Lane Hedlund. University of Arizona Press, Tucson.

Leather, Skin, Fur

Canadian Conservation Institute (CCI)

- 1992a **Care of Alum, Vegetable, and Mineral Tanned Leather**. CCI Notes on Leather, Skin and Fur No. 8/2. Ottawa, Canada.
- 1992b **Care of Rawhide and Semi-Tanned Leather**. CCI Notes on Leather, Skin, and Fur No. 8/4. Ottawa, Canada.

Kite, Marion, and Roy Thomson (editors)

- 2006 **Conservation of Leather and Related Materials.** Butterworth-Heinemann Series in Conservation and Museology. Butterworth-Heinemann, Burlington, Massachusetts.

Mühlethaler, Bruno

- 1973 **Conservation of Waterlogged Wood and Wet Leather.** Editions Eyrolles, Paris, France.

Stambolov, T.

- 1969 **Manufacture, Deterioration and Preservation of Leather: a Literature Survey of Theoretical Aspects and Ancient Techniques.** *In:* ICOM Preprints 2nd Triennial Meeting (Amsterdam). ICOM Committee for Conservation, Paris, France.

Stone, Tom, and Carole Dignard

- 2011 **Care of Mounted Specimens and Pelts.** Rev. ed. CCI Notes on Leather, Skin, and Fur No. 8/3. Ottawa, Canada.

Stone, Tom, Carole Dignard, and Janet Mason

- 2010 **Care of Quillwork.** Rev. ed. CCI Notes on Ethnographic Materials No. 6/5. Ottawa, Canada.

Lighting

Feller, Robert

- 1968 **Control of Deteriorating Effects of Light on Museum Objects: Heating Effects of Illumination by Incandescent Lamps.** Museum News Technical Supplement No. 46.

Macleod, K. J.

- 1978 **Museum Lighting.** Canadian Conservation Institute, Technical Bulletin No. 2. Ottawa, Canada.

National Center for Preservation Technology & Training (NCPTT)

- 2014 **Museum Lighting Protocols (1998-31).** Electronic document, <http://ncptt.nps.gov/blog/museum-lighting-protocols-1998-31/>, accessed October 7, 2015.

Weiss, Susan

1977 **Proper Exhibition Lighting.** Technology & Conservation 1.

Metals

Barclay, Bob, and Charles Hettip

2007 **The Cleaning, Polishing and Protective Waxing of Brass and Copper.**
Rev. ed. CCI Notes on Metals No. 9/3. Ottawa, Canada.

Logan, Judy

2007 **Identifying Archaeological Metal.** Rev. ed. CCI Notes on
Archaeological and Field Conservation No. 4/1. Ottawa, Canada.

Logan, Judy, and Lyndsie Selwyn

2007a **Recognizing Active Corrosion.** Rev. ed. CCI Notes on Metals No. 9/1.
Ottawa, Canada.

2007b **Storage of Metals.** Rev. ed. CCI Notes on Metals No. 9/2. Ottawa,
Canada.

Logan, Judy, Lyndsie Selwyn, Clifford Cook, and Tara Grant

2013 **Tannic Acid Coating for Rusted Iron Artifacts.** Rev. ed. CCI Notes on
Metals No. 9/5. Ottawa, Canada.

Maryon, Herbert

1971 **Metalwork and Enamelling.** 5th rev. ed. Dover Publications, New York.

National Bureau of Standards

1977 **Corrosion and Metal Artifacts: A Dialogue Between Conservators
and Archaeologists and Corrosion Scientists.** U.S. Dept. of Commerce,
National Bureau of Standards Publication 479.

Stone, Tom

2007 **Basic Care of Coins, Medals and Medallic Art.** Rev. ed. CCI Notes on
Metals No. 9/4. Ottawa, Canada.

Paper

Clapp, Anne F.

1987 **Curatorial Care of Works of Art on Paper.** Lyons & Burford Publications, Inc., New York.

Dolloff, Francis W.

1985 **How to Care for Works of Art on Paper.** 4th ed. Museum of Fine Arts, Boston, Massachusetts.

Horton, Carolyn

1969 **Cleaning & Preserving Bindings & Related Materials.** 2nd ed. American Library Association, Library Technology Programs, Chicago.

Pests

Florian, Mary-Lou

1990 Freezing for Museum Insect Pest Eradication. **Collection Forum** 6(1):1–7.

Pinniger, David

1994 **Insect Pests in Museums.** 3rd ed. Archetype Books, Institute of Archaeology, University College, London, UK.

Story, Keith O.

1985 **Approaches to Pest Management in Museums.** Smithsonian Institution, Washington, D.C.

Strang, Thomas J. K.

1997 **Controlling Insect Pests with Low Temperature.** Canadian Conservation Institute, CCI Notes No. 3/3. Ottawa, Canada.

Strang, Thomas J. K., and John E. Dawson

1991 **Controlling Museum Fungal Problems.** Canadian Conservation Institute, CCI Technical Bulletin No. 12. Ottawa, Canada.

Ward, Philip R.

1976 **Getting the Bugs Out.** Friends of the Provincial Museum, Victoria, British Columbia.

Stabilizers

- Brady, George S., Henry R. Clauser, and John A. Vaccari
2002 **Materials Handbook**. 15th ed. McGraw Hill, New York.
- MacBeth, James A., and Alfred C. Strohlein
1965 **The Use of Adhesives in Museums**. Museum News Technical Supplement No. 7. [CAUTION: Does NOT give solvents for any of the adhesives]
- Skeist, Irving
1989 **Handbook of Adhesives**. 3rd ed. Van Nostrand Reinhold, New York.
- U.N.E.S.C.O.
1963 **Synthetic Materials Used in Conservation of Cultural Property**. International Center for Study of the Preservation and Restoration of Cultural Property. UNESCO Rome Center, Rome, Italy.

Wood

- Barclay, R. L., R. Eames, and A. Todd
n.d. **The Care of Wooden Objects**. Canadian Conservation Institute, Technical Bulletins No. 8. Ottawa, Canada.
- Jespersen, K.
1985 Extended Storage of Waterlogged Wood in Nature. *In: Waterlogged Wood: Study and Conservation*. Proceedings of 2nd ICOM Waterlogged Wood Working Group Conference, Grenoble, France, 1984.
- Kinnear-Ferris, Sharyl
2007 A Dated Split-Twig Figurine from Western Colorado. **Kiva** 72(3):345–352.
- Laubin, Reginald, and Gladys Laubin
1977 **The Indian Tipi: Its History, Construction, and Use**. 2nd ed. University of Oklahoma Press, Norman.
- McEwen, Edward, Robert L. Miller, and Christopher A. Bergman
1991 Early Bow Design and Construction. **Scientific American** 264(6):76–82.

Mühlethaler, Bruno

1973 **Conservation of Waterlogged Wood and Wet Leather.** Editions Eyrolles, Paris, France.

Ethnographic Uses and Plant Identification References

by Margaret Van Ness

[* = primary ethnographic reference; • = secondary reference; ◇ = plant ID; √ = recommended for the public]

Alley, Harold P., and Gary A. Lee

1979◇ **Weeds of Wyoming.** University of Wyoming Agricultural Experiment Station, University of Wyoming, Laramie.

Arnberger, Leslie P., and Carolyn Dodson

1983◇ **Flowers of the Southwest Mountains.** Revised ed. Southwest Parks and Monuments Association, Globe, Arizona.

Arnow, Lois A., Beverly J. Albee, and Ann M. Wyckoff

1980◇ **Flora of the Central Wasatch Front, Utah.** University of Utah Printing Service, Salt Lake City.

Balls, Edward K.

1962 **Early Uses of California Plants.** University of California Press, Berkeley.

Barkley, Theodore M.

1983◇ **Field Guide to the Common Weeds of Kansas.** University of Kansas Press, Lawrence.

Barkworth, Mary E., Laurel K. Anderton, Kathleen M. Capels, Sandy Long, and Michael B. Piep (editors)

2007◇ **Manual of Grasses for North America.** Utah State University Press, Logan.

Barrell, Joseph

1969◇ **Flora of the Gunnison Basin: Gunnison, Saguache, and Hinsdale Counties, Colorado.** Natural Land Institute, Rockford, Illinois.

Blankenship, J.W.

1905* **Native Economic Plants of Montana.** Montana Agricultural Experiment Station, Bulletin 56.

Brown, Lauren

n.d.◇ **Grasslands.** Alfred A. Knopf, New York.

1977◇ **Weeds in Winter.** Houghton Mifflin Co., Boston, Massachusetts.

Bye, Robert

1972* Ethnobotany of the Southern Paiute Indians in the 1870's: with a Note on the Early Ethnobotanical Contributions of Dr. Edward Palmer. *In: Great Basin Cultural Ecology: A Symposium*, edited by Don D. Fowler. Desert Research Institute Publications in the Social Sciences No. 8.

1979 **Quelites—Ethnoecology of Edible Greens—Past, Present and Future.** Paper presented at the 2nd Conference on Ethnobiology, Flagstaff, Arizona.

Carter, Jack L.

1995◇ **Trees and Shrubs of Colorado.** Johnson Books, Boulder, Colorado.

Castetter, Edward F.

1935* Uncultivated Native Plants Used as Sources of Food. Ethnobiological Studies in the American Southwest. **The University of New Mexico Bulletin**, Whole Number 266, Biological Series Vol. 4, No. 1. University of New Mexico Press, Albuquerque.

Castetter, Edward F., and Willis H. Bell

1937* The Aboriginal Utilization of the Tall Cacti in the American Southwest. Ethnobiological Studies in the American Southwest. **The University of New Mexico Bulletin**, Whole Number 307, Biological Series Vol. 5, No. 1. University of New Mexico Press, Albuquerque.

Chamberlin, Ralph V.

1911* The Ethno-botany of the Gosiute Indians of Utah. **Memoirs of the American Anthropological Association** II(5):329–405. Lancaster, Pennsylvania.

Craighead, John J., Frank C. Craighead, and Ray J. Davis

- 1998◇ **A Field Guide to Rocky Mountain Wildflowers: Northern Arizona and New Mexico to British Columbia.** Peterson Field Guides. Houghton Mifflin Co., Boston, Massachusetts.

Curtin, L. S. M.

- 1949* **By the Prophet of the Earth: Ethnobotany of the Pima.** University of Arizona Press, Tucson.

- 1957* Some Plants Used by the Yuki Indians of Round Valley, Northern California. **Southwest Museum Leaflets** No. 27, pp. 3–20. Los Angeles, California.

- 1997• **Healing Herbs of the Upper Rio Grande: Traditional Medicine of the Southwest,** revised and edited by Michael Moore. Western Edge Press, Santa Fe, NM.

√Cushing, Frank Hamilton

- 1920* Zuni Breadstuff. **Indian Notes and Monographs** Vol. VIII. Museum of the American Indian, Heye Foundation, New York.

Densmore, Frances

- 1928* Uses of Plants by the Chippewa Indians. **Forty-fourth Annual Report of the Bureau of American Ethnology,** pp. 275–397. Washington, D.C.

Dodge, Natt N.

- 1985◇ **Flowers of the Southwest Deserts.** Revised ed. Southwest Parks and Monuments Association, Globe, Arizona.

√Dodson, Carolyn, and William W. Dunmire

- 2007◇ **Mountain Wildflowers of the Southern Rockies: Revealing Their Natural History.** University of New Mexico Press, Albuquerque.

Dutcher, B. H.

- 1893* Pinon Gathering Among the Panamint Indians. **The American Anthropologist** 6:377–380.

Elliott, Brian A.

- 2009◇ **Handbook of Edible and Poisonous Plants of Western North America.** Elliott Environmental Consulting, Laramie, Wyoming.

√Elmore, Francis H.

1976◇ **Shrubs and Trees of the Southwest Uplands**. 2nd ed. Southwest Parks and Monuments Association, Globe, Arizona.

Epple, Anne Orth

1995◇ **A Field Guide to the Plants of Arizona**. LewAnn Publishing Co., Mesa, Arizona. Distributed by Falcon Press Publishing Co., Helena, Montana.

Foster, Steven, and Christopher Hobbs

2002◇ **Western Medicinal Plants and Herbs**. Peterson Field Guides. Houghton Mifflin Co., Boston.

Gibbons, Euell

1988 **Stalking the Wild Asparagus**. Reprint ed. Alan C. Hood & Co., Inc., Chambersburg, Pennsylvania.

Gilmore, Melvin R.

1913a* A Study in the Ethnobotany of the Omaha Indians. **Collections of the Nebraska State Historical Society** XVII:314–357. Lincoln, Nebraska.

1913b*Some Native Nebraska Plants With Their Uses by the Dakota.
Collections of the Nebraska State Historical Society XVII:358–370.
Lincoln, Nebraska.

√ 1991* **Uses of Plants by the Indians of the Missouri River Region**. Enlarged ed. Reprint of 1919 report. University of Nebraska Press, Lincoln.

Goodrich, Sherel, and Elizabeth Neese

1986◇ **Uinta Basin Flora**. USDA-Forest Service, Intermountain Region, Ogden, Utah.

Gray, Asa

1908◇ **Gray's New Manual of Botany**. 7th ed. American Book Co., New York.

Grinnell, George Bird

1972* Useful Plants. *In: The Cheyenne Indians* Vol. II, pp. 166–191. Reprint of 1923 report. University of Nebraska Press, Lincoln.

Gunther, Erna

1977* **Ethnobotany of Western Washington: the Knowledge and Use of Indigenous Plants by Native Americans.** University of Washington Press, Seattle.

Hallsten, Gregory P., Quentin D. Skinner, and Alan A. Beetle

1987◇ **Grasses of Wyoming.** 3rd ed. Research Journal 202, Agricultural Experiment Station, University of Wyoming, Laramie.

Harrington, Harold D.

√ 1964◇ **Manual of the Plants of Colorado.** The Swallow Press, Chicago, Illinois.

√ 1977a◇ **Edible Native Plants of the Rocky Mountains.** The University of New Mexico Press, Albuquerque.

1977b◇ **How to Identify Grasses and Grasslike Plants.** The Swallow Press, Chicago, Illinois.

Hastorf, Christine A., and Virginia S. Popper (editors)

1988 **Current Paleoethnobotany: Analytical Methods and Cultural Interpretations of Archaeological Plant Remains.** Prehistoric Archeology and Ecology series. University of Chicago Press, Chicago, Illinois.

Havard, V.

1985 Food Plants of the North American Indians. **Torrey Botanical Club Bulletin** 22:98–123.

Heil, Kenneth D., Steve L. O’Kane, Jr., Linda Mary Reeves, and Arnold Clifford

2013◇ **Flora of the Four Corners Region, Vascular Plants of the San Juan River Drainage: Arizona, Colorado, New Mexico, and Utah.** Missouri Botanical Garden Press, Saint Louis.

Hitchcock, A. S.

1990◇ **Manual of the Grasses of the United States.** U.S. Department of Agriculture, Miscellaneous Publication No. 200. Reprint of the 1950 edition. Peter Smith Publications Inc., Magnolia, Massachusetts.

Hocking, George M.

1956* Some Plant Materials Used Medicinally and Otherwise by the Navajo Indians in Chaco Canyon, New Mexico. **El Palacio** 63:146–165.

Ivey, Robert DeWitt

1983◇ **Flowering Plants of New Mexico.** Published by the author, Albuquerque, New Mexico.

Johnson, James R., and James T. Nichols

1970◇ **Plants of the South Dakota Grasslands.** Agricultural Experiment Station Bulletin 566. South Dakota State University, Brookings.

Johnston, Alexander

1969 Man's Utilization of the Flora of the Northwest Plains. **Chacmool 1969**, pp. 109–177. The University of Calgary Archaeological Association, The Student Press, Calgary, Alberta.

1970 Blackfoot Utilization of the Flora of the Northwest Plains. **Economic Botany** 24(3):301–324.

Kearney, Thomas H., and Robert H. Peebles

1960◇ **Arizona Flora.** 2nd revised ed. University of California Press, Berkeley.

Kelly, Isabel T.

1964* **Southern Paiute Ethnography.** University of Utah Anthropological Papers No. 69, Glen Canyon Series No. 21, edited by Jesse D. Jennings. University of Utah Press, Salt Lake City.

Kinch, Raymond C.

1967◇ **South Dakota Weeds.** Agriculture Extension Service, South Dakota State University, Brookings.

√Kindscher, Kelly

1987 **Edible Wild Plants of the Prairie.** University of Kansas Press, Lawrence.

Little, Elbert L.

1976◇ **Southwestern Trees: A Guide to the Native Species of New Mexico and Arizona.** USDA-Forest Service, Agriculture Handbook No. 9, Washington, D.C.

Martin, Alexander C., and William D. Barkley

1961◇ **Seed Identification Manual.** University of California Press, Berkeley.

- McDougall, Walter B.
1973◊ **Seed Plants of Northern Arizona.** The Museum of Northern Arizona, Flagstaff.
- McGregor, Ronald L. (coordinator)
1986◊ **Flora of the Great Plains.** University of Kansas Press, Lawrence.
- McPherson, Alan, and Sue McPherson
1979 **Edible and Useful Wild Plants of the Urban West.** Pruett Publishing Co., Boulder, Colorado.
- Minnis, Paul E. (editor)
2000• **Ethnobotany: A Reader.** University of Oklahoma Press, Norman.

2010◊ **People and Plants in Ancient Western North America.** University of Arizona Press, Tucson.
- Moerman, Daniel E.
1998• **Native American Ethnobotany.** Timber Press, Portland, Oregon.

2009√ **Native American Medicinal Plants: An Ethnobotanical Dictionary.** Abridged ed. Timber Press, Portland, Oregon.
- Montgomery, Frederick H.
1978◊ **Seeds and Fruits of Plants of Eastern Canada and Northeastern United States.** University of Toronto Press, Toronto, Ontario.
- √Moore, Michael
1979 **Medicinal Plants of the Mountain West.** Museum of New Mexico Press, Santa Fe.
- Morris, Elizabeth Ann
2006 Two Plant Foods Available to Prehistoric Indians: Nutritional Content of *Pinus ponderosa* Nuts and *Rhus trilobata* (Skunkbrush) Fruit from the Plains–Foothills Ecotone. **Southwestern Lore** 72(4):27–32.
- Murphey, Edith Van Allen
1959* **Indian Uses of Native Plants.** Mendocino County Historical Society, Fort Bragg, California.

Musil, Albina F.

- 1978◇ **Identification of Crop and Weed Seeds.** U.S. Department of Agriculture, Handbook No. 219. U.S. Government Printing Office, Washington, D.C.

Nelson, Ruth Ashton, and Roger Williams

- 1992◇ **Handbook of Rocky Mountain Plants.** 4th ed. Roberts Rinehart Publications, Inc., Boulder, Colorado.

Newberry, J. S.

- 1888* Food and Fiber Plants of the North American Indians. **Popular Science Monthly** 32:31–46.

Niethammer, Carolyn

- 1974 **American Indian Food and Lore.** Macmillan Publishing Co., New York.

Palmer, Edward

- 1871* Food Products of the North American Indians. **Report to the Commissioner of Agriculture for 1870**, pp. 404–428. U.S. Government Printing Office, Washington, D.C.

- 1878* Plants Used by the Indians of the United States. **American Naturalist** 12:593–606.

Parker, Kittie F.

- 1972◇ **An Illustrated Guide to Arizona Weeds.** The University of Arizona Press, Tucson.

Patraw, Pauline M.

- 1977◇ **Flowers of the Southwest Mesas.** Southwest Parks and Monuments Association, Globe, Arizona.

Pesman, M. Walter

- 1992◇ **Meet the Natives: An Amateur's Field Guide to Rocky Mountain Wildflowers, Trees and Shrubs.** Roberts Rinehart Publications, Inc., Boulder, Colorado.

Porsild, A. E.

- 1987◇ **Rocky Mountain Wildflowers.** University of Chicago Press, Chicago, Illinois.

Porter, C. L.

1963◇ **A Flora of Wyoming.** Agricultural Experiment Station, University of Wyoming, Laramie.

1979◇ **Wyoming Trees.** Agriculture Extension Service, University of Wyoming, Laramie.

Preston, Richard J.

1968◇ **Rocky Mountain Trees.** Dover Publications, Inc., New York.

Robbins, W. William, John P. Harrington, and Barbara Frerie-Marreco

1916* **Ethnobotany of the Tewa Indians.** Bureau of American Ethnology Bulletin 55, pp. 1–124. U.S. Government Printing Office, Washington, D.C.

Roberts, Harold, and Rhoda Roberts

1975◇ **Colorado Wild Flowers.** Bradford-Robinson Printing Co., Denver, Colorado.

Rogers, Dilwyn

1980 **Edible, Medicinal, Useful, and Poisonous Wild Plants of the Northern Great Plains-South Dakota Region.** Biology Department, Augustana College, Sioux Falls, South Dakota.

Shaw, Richard J.

1968◇ **Vascular Plants of Grand Teton National Park, Wyoming.** Revised ed. Grand Teton Natural History Association, Moose, Wyoming.

Spellenberg, Richard

1979◇ **The Audubon Society Field Guide to North American Wildflowers.** Alfred A. Knopf, Inc., New York.

Stephens, Homer A.

1969◇ **Trees, Shrubs, and Woody Vines in Kansas.** University Press of Kansas, Lawrence.

1973◇ **Woody Plants of the North Central Plains.** University Press of Kansas, Lawrence.

Stevenson, Matilda Coxe

1915* Ethnobotany of the Zuni Indians. **Thirtieth Annual Report of the Bureau of American Ethnology**, pp. 35–101. U.S. Government Printing Office, Washington, D.C.

Stewart, Julian H.

1933* Ethnography of the Owens Valley Paiute. **University of California Publications in American Archaeology and Ethnology** 33(3):233–350. Reprint ed., Coyote Press, Salinas, California.

1995* **Basin-Plateau Aboriginal Sociopolitical Groups**. Bureau of American Ethnology Bulletin 120. Reprint of 1938 report. Reprint Services Corp., Temecula, California.

Stubbenieck, James, Stephan L. Hatch, and Kathie J. Kjar

1992◇ **North American Range Plants**. 4th ed. University of Nebraska Press, Lincoln.

Taylor, Ronald J.

1992◇ **Sagebrush Country: A Wildflower Sanctuary**. Mountain Press, Missoula, Montana.

√Thornton, Bruce J., Harold D. Harrington, and Robert L. Zimdahl

1974◇ **Weeds of Colorado**. Colorado State University Experiment Station, Fort Collins, Colorado.

Train, Percy, James R. Henrichs, and W. Andrew Archer

1957* **Medicinal Uses of Plants by Indian Tribes of Nevada**. Quarterman Publications, Lawrence, Massachusetts.

United States Department of Agriculture

1971◇ **Common Weeds of the United States**. Dover Publications, New York.

Vance, Fenton R., James R. Jowsey, and James S. McLean

1984◇ **Wildflowers of the Northern Great Plains**. Revised ed. University of Minnesota Press, Minneapolis.

Vestal, Paul A.

1987* Ethnobotany of the Ramah Navajo. Reports of the Ramah Project No. 4. **Papers of the Peabody Museum of American Archaeology and**

Ethnology Vol. XL, No. 4. Reprint ed. Redwood City Seed Co.,
Redwood City, California.

Vestal, Paul A., and Richard Evans Schultes

1939* **The Economic Botany of the Kiowa Indians.** Botanical Museum,
Cambridge, Massachusetts.

Vines, Robert A.

1986◇ **Trees, Shrubs, and Woody Vines of the Southwest.** University of Texas
Press, Austin, Texas.

Weber, William A.

√ 1991◇ **Rocky Mountain Flora.** 5th ed. University Press of Colorado, Niwot.

Weber, William A., and Ronald C. Wittman

2001a◇ **Colorado Flora: Eastern Slope.** 3rd ed. University Press of Colorado,
Boulder.

2001b◇ **Colorado Flora: Western Slope.** 3rd ed. University Press of Colorado,
Boulder.

Welsh, Stanley L., N. Duane Atwood, Sheral Goodrich, and Larry C. Higgins

1987◇ **A Utah Flora.** Great Basin Naturalist Memoir No. 9.

√Wheeler, Elizabeth M.

1994◇ **Mother Earth's Mercantile: Plants of the Four Corners Area and
Their Uses Through Time.** Crow Canyon Archaeological Center,
Cortez, Colorado.

√Whiting, Alfred F.

1993* **Ethnobotany of the Hopi.** Museum of Northern Arizona Bulletin 15.
Reprint ed. Redwood City Seed Co., Redwood City, California.

Yanovsky, Elias

1993* **Food Plants of the North American Indians.** United States Department
of Agriculture, Miscellaneous Publication No. 237. Reprint ed. Redwood
City Seed Co., Redwood City, California.

Zigmond, Maurice L.

1981* **Kawaiisu Ethnobotany.** University of Utah Press, Salt Lake City.

Useful Web Sites

AATA On-Line

- 2015 **Abstracts of International Conservation Literature.** Electronic document, <http://aata.getty.edu/Home>, accessed October 7, 2015 [a free searchable database on the preservation and conservation of material culture].

Canadian Conservation Institute (CCI)

- 2013 **CCI Notes.** Ottawa, Canada. Electronic document, <http://www.cci-icc.gc.ca/publications/notes/index-eng.aspx>, accessed October 7, 2015 [“the Notes offer practical advice about issues and questions related to the care, handling, and storage of cultural objects”].

National Center for Preservation Technology and Training

- 2015 **“NCPTT advances the application of science and technology to historic preservation.”** Electronic document, <http://ncptt.nps.gov/>, accessed October 7, 2015.

USDA Natural Resources Conservation Service

- 2015 **PLANTS Database.** Electronic document, <http://plants.usda.gov/java/>, accessed October 7, 2015 [“provides standardized information about the vascular plants, mosses, liverworts, hornworts, and lichens of the U.S. and its territories”].

HANDOUT 2 — Perishable Materials

[8/2009]

Glossary

Adventitious remains: human remains that are presently not part of a formal burial.

Angle of Twist: the angle that the slant of the twist makes relative to the vertical axis of the yarn. Angle of twist is categorized as loose (angle $\leq 10^\circ$), medium (angle from 11° to 25°) or tight (angle from 26° to 45°).

Articular: the joint surface of a bone, at its junction with an adjoining bone element.

Articulated: bones being in correct anatomical position, with few or no missing elements.

Artiodactyla: order of mammals including even-toed herbivores such as deer, elk, bighorn sheep, bison, etc. [from Greek *artios*, “even, matching” + *daktulos*, “finger”]

Aspergill: an instrument, such as a brush or a feather bundle, used in ceremonies for sprinkling or dispersing a substance [from Latin *aspergere*, “to sprinkle”]

Atlatl: a spear throwing tool, commonly of wood [from the Aztec’s Nahuatl language].

Basketry: a craft utilizing woven coarse materials for the production of a semi-rigid to rigid container. Forms range from flat to shallow to very deep, and from open to very constricted orifice. Baskets are made without benefit of any artificial device such as a loom and, therefore, sandals are technically included in the craft.

Bast fibers: soft, elongated strands from the inner bark or stalk of plants such as *Apocynum* sp. [Indian hemp], flax, nettles and milkweed.

Batten: flattened length of wood with rounded ends and smoothed to remove splinters, used on a loom to tamp down weft threads and to separate the warp threads.

Bead: a division within a segment, representing one of its component strands. Beads are usually clearly defined because of the opposing angles of twist of the strands. Beads may be single or compound.

Beamer: long bone artifact using the broken/cut edge of the shaft as hide dressing/scraping tool.

Bowed: describes wool from which dried fibers have been extracted, along with remnant dust.

Bull-roarer: perforated stick strung from cordage and twirled in the air to make a “roaring” sound.

Calcareous: limey, containing calcium compounds such as CaCO_3 .

Calcined: bone heated to a high temperature but below the fusing point, causing a loss of moisture, reduction or oxidation; such bone has a powdery white to blue-white appearance.

Card: to comb out wool or cotton so fibers align in one direction.

Chips: raw materials split from annual growth rings of a woody plant.

Clefts: raw materials split radially from timber.

Coiling: a “sewing” type of basket weaving in which the warp material(s) is a continuous spiral and each coil [warp] is secured by sewing the weft into the adjacent coil(s) below.

Collagen: protein fraction of bone; also in cartilage and connective tissue.

Colored Textiles: a decoration style using dyed threads during the weaving process, or dyeing the finished textile after the weaving is complete.

Coprolite: desiccated or otherwise preserved animal feces [from Greek *kopros*, “dung”].

Cord: a type of yarn made from twisting together two or more plied yarns; along with string and thread, this term also has been used to mean any type of yarn.

Core Cord: a cord that serves as the primary element, core or foundation upon which supplementary cords, knots or other elaborations are imposed.

Crest: a ridge, especially one surmounting a bone or its border.

Desiccated: thoroughly dried; devoid of moisture content.

Diaphysis: the mid-portion or shaft of a long bone.

Ecofact: biological material present in a site due to human activity but not obviously modified by people such as a bone fragment, seed, burned wood, etc.

Ecotone: the ecological area where two vegetation communities meet, such as the lodgepole pine–sagebrush interface common around the margins of some high mountain valleys.

Ecozone: a vegetation community and its environment—including the fauna, soil, climate, etc.

Elements: yarns (fibers twisted together), leaves (crushed, split or whole), or other materials used to create textiles.

Emulsion: a suspension of small globules of one liquid in a second liquid with which the first will not mix; in conservation, various adhesives soluble in water are used to preserve waterlogged/wet artifacts.

Epiphysis: the articular surface or end of a bone.

Ethnobotany: the study of plants and the manner in which they were used by a cultural group; the study of plant use in ancient times is *paleo-ethnobotany*.

Fabric: any type of construction made of fibers including woven, twined, and braided fabric structures.

Fauna: animals collectively, especially the animals of a particular region or time.

Fiber: the smallest untwisted component of a strand or bead. Also, raw material that has enough flex, strength and high length-to-width ratio to be used in fabric structures. *Stock fibers* are those kept in storage, often in bundles.

Flora: plants collectively, especially the vegetation of a particular region or time.

Flotation: a bulk soil sample, usually collected from partially burned archaeological deposits, processed by immersion in water to recover suspended organic materials such as seeds.

Foramen: a small opening or orifice in a bone [from Latin *forāmen*, “an opening”].

Friable: readily crumbled or brittle, e.g., a characteristic of some pottery vessels in the mountains and plains [from Latin *friābilis*, “crumbling”].

Groove: a shallow linear depression, often marking blood vessel locations.

Intrusive: material present naturally in a site rather than a by-product of human activity, e.g., skeletal remains of burrowing rodents.

Jacal: Spanish name for a form of mud-and-stick architecture common in Colorado and the west. A series of vertical poles with intervening matting or other fine vegetation is plastered on both interior and exterior surfaces with clay-rich mud. “Wattle-and-daub” architecture is one variation seen in the Mesa Verde region.

Loom: mechanical device designed to keep the warp under stress during weaving. A vertical or parallel loom refers to the orientation to the ground surface, perpendicular or horizontal.

MAU: *Minimum Animal Units*; archaeological bone values of “minimum number of elements” expressed as a percentage, adjusted to account for the differential frequencies of each bone element class in a complete skeleton.

Metapodial: foot bone (metacarpal or metatarsal) of a large quadruped such as deer and bighorn sheep, commonly fashioned into a tool such as an awl.

MNI: *Minimum Number of Individuals*; archaeological bone count equal to the highest number of any single skeletal element of a species identified in a faunal inventory.

NISP: *Number of Identifiable Specimens*; archaeological bone count equal to the total number of bone elements identified for each species in a faunal inventory.

Ossification: the process of bone formation; the hardening into a bony substance.

Ossuary: multiple grave sites, either primary or secondary, in which there is often some overlap in the position of individual sets of human remains.

Osteology: study of the bony anatomy of an animal [from Greek *osteon*, “bone”].

Palynology: the scientific study of pollen and spores [from Greek *palunein*, “to sprinkle”].

Pathology: study of the essential nature of diseases and, especially, of the structural and functional changes produced by them.

Pattern Weaving: a type of weaving where the warp and the weft crossings are arranged to form a design. This can be done using different types of threads or colored threads.

Perissodactyla: order of mammals including odd-toed herbivores such as horses and rhinoceroses [from Greek *perissos*, “uneven, excessive” + *daktulos*, “finger”].

Plaiting: the simplest basket weaving technique; both the warp and weft are of equal size, shape, weight and pliability. The elements are flat in form.

Plied Yarn: a type of yarn made from twisting together two or more single yarns.

Polster: a moss clump collected with adhering sediment as a modern pollen sample.

Post-cranial: that part of a skeleton beyond the skull, i.e. “from the neck down.”

Provenance: location of origin, e.g., a specific source area for wood or cotton [from Latin *pro-*, forth + *venire*, to come].

Provenience: location of discovery, e.g., the excavation grid coordinates and vertical elevation of a wood or cotton artifact.

Process: a slender projecting point on a bone.

Raw material: basic elements utilized in the production of baskets. The material is generally stiff and taken from shoots of trees and shrubs.

Rods: basket-making raw materials consisting of the shoots of a single year’s growth.

Segment: one revolution of a strand in the final combination creating a cord. When a cord is held vertically and viewed from one side, a segment is one diagonal unit.

Sinew: material of animal tendons, commonly processed to utilize the fibers for cordage, hafting material, etc.

Single Yarn: see **Strand**.

Skeins: basket-making raw materials of young growth split longitudinally.

Solvent: a liquid capable of dissolving another substance; in conservation, various adhesives are dissolved in acetone, ethanol, xylene, etc. (but not water) then applied as preservatives to artifacts in dry conditions.

Spinning: the process of twisting the fibers together to produce thread or yarn for weaving. Threads may be produced by thigh spinning (rolling the fibers across the leg), or spindle spinning (spinning fiber using a short rod and flywheel/spindle).

Spun: fibers twisted together to produce a continuous strand. Two basic types are created by reversing the direction (L or R) of the spin or twist. An “S” cord has the largest segments slanting from upper left to lower right, and is produced by twisting to the right. A “Z” cord has the largest segments slanting from upper right to lower left, produced by twisting to the left.

Sticks: basket-making raw materials of consisting of shoots two or more years old.

Strand: a unit composing a cord, consisting of one or more sets of fibers twisted individually or together. Equivalent to the term “single yarn” preferred for textiles.

Subsistence: the food a culture uses to survive, and how it is acquired.

Suture: sinuous joint between two bones in the cranium.

Taphonomy: the study of the post-occupational processes leading to the preservation/destruction of a material such as bone.

Tease: to pull apart wool or cotton to remove foreign objects.

Textile: flexible woven artifacts generally produced on a loom.

Tinkler: an elongated bone, metal or other non-lithic artifact combined with others in a necklace and suspended to a uniform length so as to make noise (“tinkling” sound) like a wind chime while worn.

Tubercle: a small tuberosity or prominence on a bone, marking a muscle attachment.

Twining: a type of fabric construction method using two sets of yarns in which one set of yarns is twisted, commonly in pairs, around another set of yarns. In contrast to weaving, twining involves twisting of yarns around other yarns, not interlacing. The term also is used for a basket weaving technique in which the more rigid warp is held stationary and vertical to the weaver, while the more flexible weft is woven across the warps horizontally. Some analysts equate this

technique with **Wicker**, and some specify that true twining involves passing two wefts simultaneously from opposite directions. The technique was commonly used in prehistoric bag manufacture.

Warp: one group of parallel threads kept under constant tension on a loom. Also, the foundation or basic framework of a basket, generally more rigid than the weft.

Weaves: creating a design in a textile by the manner in which the weft is woven through the warp.

Weft: a group of parallel threads that pass at a right angle, over and under the warp threads of a textile. These threads form the bulk of the visible textile. Also, the filler woven around/over/under the warp on a basket, generally more pliable than the warp.

Wicker: see Twining, above.

Woof: same as Weft, above.

Yarn: the general term for a variety of elements made from fibers.

Zooarchaeology: the study of bones and other faunal material in archaeological contexts, and the manner in which animals were used by a cultural group.