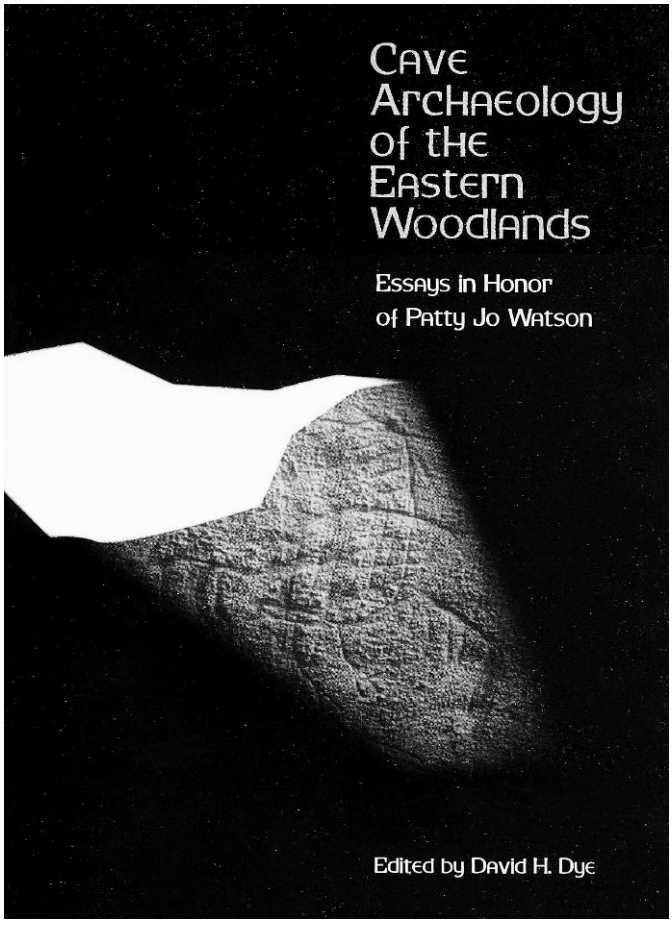
BOOK REVIEW



Cave Archaeology of the Eastern Woodlands: Essays in Honor of Patty Jo Watson

David H. Dye (Ed.), 2008. Knoxville, Tenn., University of Tennessee Press, 304 p. ISBN 978-1-57233-608-7, hardcover, 6 × 9 inches, $42.95.

This collection of essays is the result of a 2004 Southeastern Archaeology Conference in honor of Dr. Patty Jo Watson and definitely does justice to the exemplary work in cave archaeology pioneered by Dr. Watson. David Dye opens the volume with a description of doing work with Dr. Watson and chronicles her diverse and highly commendable fieldwork. The chapter ends with a useful bibliography of her work. The rest of the volume is divided into two sections: Prehistoric Cave Use and Historic Cave use, with the former comprising the bulk of the volume.

The section on Prehistoric Cave Use covers a vast array of topics, many of which include interesting anecdotes about working with Dr. Watson, or the influence of her work on their own research. The first chapter (Sherwood) concerns the interpretation of burned deposits at the site of Dust Cave, Alabama. Such deposits can be difficult to interpret. This study illustrates the utility of micromorphology in discerning differences between *in situ* fireplaces, mixed burned deposits, and fireplace rakeout. The next two chapters are more historical in nature and highlight the work of Nels Nelson in the Mammoth Cave vestibule (Trader, Ward, and Switzer) and the 1978 season at Mammoth Cave (Carstens). The chapter by Carstens includes some great photos from the season. Chapter 4 (Barrier and Byrd) explores the beginning of gypsum mining at Indian Salts Cave, Kentucky, and also discusses the two forms of gypsum found in caves and two different mining methods that were utilized. Chapter 5 (Pritchard) also focuses on gypsum mining, this time at Hubbards Cave in Tennessee. Through the use of GIS to identify the location of the mining and X-ray diffraction to identify the minerals, this study documents that the prehistoric mining activities at Hubbards Cave were preceded by those at Big Bone Cave, Tennessee, and Salts and Mammoth Caves, Kentucky.

Chapters 6 and 7 address evidence of plant domesticates found in cave contexts. Gremillion examines the macrobotanical remains from Mammoth and Salts Caves, as well as sandstone rock shelters in the Cumberland Plateau region of Kentucky. In Chapter 7, Pike and Meeks present an overview of paleofecal research for eastern North America and then focus on research from Big Bone Cave. Both show the importance of these kinds of research for understanding the impact of early plant domesticates in the region. Chapter 8 continues with a focus on cave sites in Tennessee (Franklin), specifically on survey results for caves in the East Fork of Obey River Gorge, Tennessee. Presenting data from four caves, this research illustrates a broad range of cave activities, including flint mining, cave art and burial activities. A good follow-up to this chapter is presented by Douglas, Roebuck and Roebuck (Chapter 9), who reveal through work at Hubble Post Office Cave that sometimes caves were explored extensively (as indicated by cane torch remnants and torch ''stoke'' marks), even where no evidence of specific human activities, such as mining, is discernable.

The next three chapters focus on cave art. Chapter 10 (Simek and Cressler) gives a useful summary of production techniques, subject matter, context, and composition. The authors illustrate this with examples from three sites in Tennessee (Mud Glyph, and 7^{th} and 11^{th} unnamed caves) and Alabama (18^{th} unnamed cave). In Chapter 11, Faulkner revisits the work at Mud Glyph cave and reflects on the challenges of cave art research (including the protection of these sites) and the benefits of working with members of the speleological community. The last chapter in this section, by Diaz-Granados, focuses on Picture Cave, a unique cave in Missouri with numerous pictographs. Diaz-Granados' work presents radiocarbon dates from

three significant pictographs, all of which were painted around 994 radiocarbon years B.P.

The second section of the volume, Historic Cave Use, includes two chapters on saltpeter mining. The first (Chapter 13, Blankenship) provides an informative explanation of saltpeter mining operations and fills in an important gap in how the process worked; specifically, the presence of "tally marks" in Cagle Saltpetre Cave, Tennessee. These marks were used to keep track of the amount of dirt processed for saltpeter, as shown by their location near mining areas but not in processing areas. The second chapter (Chapter 14, Mickelson), also examines saltpeter mining with a focus on the hydraulic systems used. Research on the Mammoth Cave saltpeter mining operation reveals that the hydraulic system used in the cave was a suction-lift system, and this knowledge can be used to estimate productivity rates for the mining operations.

The volume closes with an Afterword by Simek, who discusses future directions for cave archaeology. He contends that the future trajectory should include more multidisciplinary approaches in research, expanding the information on historical cave use, and integrating cave archaeology into a broader understanding of regional resource use. I couldn't agree more with Simek's assessment, and the essays in this volume particularly illustrate significant advances in multidisciplinary cave research. However, I think the last two objectives deserve further attention. In particular, it is telling that this volume includes only two chapters on historic activities in caves. It is clear that more work needs to be done in this area. I also think that integrating cave archaeology in a more regional perspective is important. For example, I have noticed that symposia at regional and national meetings tend to be very specific (i.e., they focus on caves, or a particular region, but not both). Cave researchers may want to include more regional, non-cave sites in their symposia, edited volumes and articles for a broader perspective. In sum, this volume is a tremendous testament to the legacy of Patty Jo Watson. The sheer expanse of topics covered, from micromorphology to gypsum mining, to Mississippian cave art and on to historic saltpeter mining, clearly illustrate the impact of Dr. Watson's research on cave archaeology. While I found each of the essays incredibly informative and thought-provoking, I particularly enjoyed the photographs and anecdotes from people who have worked with and learned from Dr. Watson. Her work has been an inspiration to many.

Reviewed by Renee B. Walker, Associate Professor, Department of Anthropology, State University of New York, Oneonta, NY 13820-4015 (walkerr@oneonta.edu).