

## RIVER VALLEY

12,500 to 8,000 Years Ago

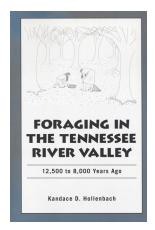
Kandace D. Hollenbach

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## Foraging in the Tennessee River Valley: 12,500 to 8,000 Years Ago

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Reviewed by Dr. Philip J. Carr, Professor of Anthropology, Center for Archaeological Studies, Department of Sociology, Anthropology, and Social Work, University of South Alabama.

Rockshelters are special sites on the landscape for both archaeologists and prehistoric people. As permanent places, undoubtedly prehistoric people placed rockshelters on their

mental map of the landscape. For archaeologists working in the southeastern United States and elsewhere, the special preservation conditions afforded by rockshelters make these sites of particular importance for recovering data useful for investigating the past. This is not a book about rockshelters *per se*, but rather about people who occupied rockshelters between 12,500 and 8,000 years ago in the Tennessee River Valley.

As a lithic analyst interested in the lifeways of prehistoric hunter-gatherers in North America, I have struggled against the limits of what method, theory, and archaeological evidence can tell us about the lifeways of ancient people. Likening lifeways to a puzzle, too few pieces and difficulties in connecting a few hard-won pieces results in an incomplete picture of that lifeway. Applying central place foraging theory derived from evolutionary ecology to reconstruct settlement-subsistence patterns, Hollenbach provides the method and theory to better fit puzzle pieces together specifically through considerations of local landscapes, return rates, processing costs, and transport costs. She also provides key pieces of the puzzle in the form of paleoethnobotanical data that bring new insights into the lifeways of prehistoric people, especially with regard to the roles of women, children, and the elderly.

In one sense, Hollenbach implicitly reminds us that adaptation is about the ability to survive and reproduce. The Anderson and Hanson model of Early Archaic settlement patterns for the U.S. South Atlantic Slope considered demography as a central theme. Hollenbach builds upon this model by including the use of aggregation sites in her settlement-subsistence model as places to find mates, among other functions. She also points out that women, children, and the elderly particularly require a stable food supply for survival. In her study area of interest, such stable resources include greens, fruits, nuts, and seeds, as well as fish and mussels. She offers the possibility that rutting deer and flocking turkeys might provide stable food supply which highlights the sophistication of her model through inclusion of seasonality of resources.

Hollenbach provides important conclusions and insights at various scales from local to global. Regarding the latter, people adopt strategies to exploit resources suited to local landscapes. She painstakingly reconstructs the local landscape using GLO survey notes produced in the early nineteenth century with consideration of regional pollen and faunal data from the Late Paleoindian and Early Archaic time periods. By arguing that local plant communities are dependent largely on topography and underlying bedrock, which have not changed significantly

over the past 14,000 years, Hollenbach connects her reconstruction to the distant past. Additionally, settlement patterns and movements of individuals are driven in large part by the need to consistently feed children, the elderly, and women. While not necessarily fully articulated in the text, presumably these movements are to satisfy that need and not necessarily to always maximize return. Return maximization does determine what resources to exploit in the local environment, and Hollenbach uses GIS to compare costs and benefits according to season and topographic setting for animals, plant, and stone. One surprising finding specific to this study is the lack of significant change in the exploitation of plants across the Pleistocene-Holocene boundary.

In working at rockshelters with deep deposits and special conditions for preservation, Hollenbach considers faunal and lithic data as additional strands of evidence complementary to her paleoethnobotanical data. Looking at each of four rockshelters in turn, she demonstrates the occupants engaged in a similar range of activities with nut collecting and processing as a key endeavor. Interestingly, the use of hickory nuts suggests stone boiling, an activity thought by other researchers outside the region to not have been used until the Middle Archaic. Variation across space in the plant assemblages is evident by the exploitation of edible seeds to a greater extent by the people living at two of the sites demonstrating exploitation of local environments. Changes in plant use through time are minimal from Late Paleoindian to Early Archaic periods with the most significant change occurring at the end of the Early Archaic when there is increased use of hickory and perhaps acorn.

As a lithic analyst who believes there was more to the lives of ancient people than just stone tools, I am delighted by the work accomplished by Hollenbach, and her commitment to considering variation in faunal and lithic assemblages along with the plant remains. Some lithic analysts have adopted an organization-of-technology approach that recognizes the importance of people's activities as well as their social and economic strategies in dictating the form and distribution of lithic artifacts. Due to both the infancy of the approach and limits of available data, activities related to stone tools are the ones largely given consideration to this point. Hollenbach points to both the importance of gathering to social and economic strategies as well as outlining some of the related specific activities. The task remaining for lithic analysts is to better articulate the ubiquitous chipped-stone tool assemblage to those and other activities.

Trained as a processual archaeologist in the 1980s, I am equally delighted by Hollenbach's work because she demonstrates the promise of that paradigm while also producing a study informed by twenty-first century technology, as well as other approaches and models. While I am unsure she fully tested hypotheses described in Chapter 2 regarding residential and logistical mobility, Hollenbach produced a study that will resonate with archaeologists of my generation and others. Her attention to theory, method, and data are exemplary. I recommend this book to anyone interested in the lives of prehistoric people before farming, as well as to paleoethnobotanists and lithic analysts. Hollenbach has produced a study worthy of consideration and emulation. I predict I will not be the only lithic analyst who reads this volume and considers how my work would articulate with that described here, and I can think of no greater compliment.