A great deal of debate has developed over the last two decades regarding the subsistence orientation of Clovis, Folsom, and other late Pleistocene and early Holocene peoples in North America. The discovery of several sites containing fluted projectile points associated with extinct Pleistocene megafauna led many researchers to argue that these early people specialized in hunting large game. This perspective was supported by hunting-oriented tool kits and by what appeared to be a highly mobile settlement system geared toward the seasonal movements of local prey populations. A growing body of research conducted in areas outside the open grassland habitats where the classic kill sites are usually located has shown a more diversified set of adaptations, including sites where smaller game appear to have constituted a large part of people's diet. These findings lead some to argue that late Pleistocene and early Holocene peoples were not big-game specialists and that the original Clovis and Folsom kill sites may have been the exception rather than the rule.

The purpose of this book is to provide additional examples of the more generalized adaptation using data from a variety of locations in North America. After a brief introduction by Renee Walker and Boyce Driskell, the book begins with two chapters dealing with Beringia, moves south with one contribution each from the east slope of the Rocky Mountains and the Great Plains, and then turns east with six chapters dealing with Wisconsin, Pennsylvania, Alabama, Florida, and several locations along the eastern seaboard from Maine to Virginia. The book ends with two theoretical chapters focusing on ethnographic analogy and human behavioral ecology, with the latter attempting to integrate findings from the entire book using the behavioral ecological framework. Although the title of the book refers to North America as a whole, most of its pages deal with sites and issues east of the Mississippi River.

Many of the chapters provide faunal and floral data, but the quality of their organization and interpretation varies from one author to the next. Some of this variability can be seen in the presentation of chronological information, where radiocarbon dates and time periods are not consistently presented (some calibrated, others not), and in a few cases local phase designations are used with no reference to absolute time at all, making it difficult for the reader to evaluate the results. Another minor problem is that an outsider is left in the dark about the 13 contributors to the volume because there are no biographical sketches of the authors.

Chapter 1 (by Stuart Fiedel) provides a general review of faunal assemblages from across the New World, emphasizing the broad-spectrum nature of these findings. He then turns to a more focused view of data from Beringia and finds that many of the oldest sites have high frequencies of bird bones. Fiedel argues that migratory birds may have been the first non-human colonists of the ice-free corridor, given their ability to fly and make use of wetland habitats, and that early humans may have followed these
flocks into the New World. He supports this hypothesis of the early importance of birds with archaeofaunal remains, netting technology, and artistic works from several sites in the lower forty-eight states and draws on the ethnographic record to use myths about migratory waterfowl from Native peoples like the Paiute of the western Great Basin.

Chapter 2 (by David Yesner) also draws on data from Beringia, focusing on findings from the Broken Mammoth Site. To my mind, this is the best chapter in the book, as Yesner divides the faunal sample into a series of components and shows how foraging strategies shifted over the Pleistocene-Holocene transition. The earliest inhabitants of the region focused on large game whenever possible, but the extinction of horses and mammoths and the declining herd sizes of bison and elk resulted in higher search and pursuit times for these large prey species. The higher search costs increased the relative advantage of mass harvesting of fish and smaller game (including birds, as in Chapter 1), creating a much more diversified diet than traditionally attributed to these early peoples.

The Great Plains and Rocky Mountains are addressed in Chapter 3, where Marcel Kornfeld provides a strong critique of what he considers the traditional view of terminal Pleistocene subsistence. Because most sites of this time period are identified by either fluted points or extinct megafauna, he argues that there has been a bias toward the study of deposits with only large game. This bias may result in overlooking ancient sites lacking fluted points and megafauna, particularly if the site assemblages are dominated by the bones of smaller animals that never became extinct. Kornfeld estimates the absolute meat yield from bison bones excavated from 27 archaeological sites, determines that this amount of meat could not have fed very many people, and concludes that people must have been dependent on something else. This logic is baffling, as it assumes that the 27 sites represent a 100% sample of what the people are in this region. This is clearly not the case, and represents a poor use of absolute meat estimates, a marginal analytical enterprise in the first place. The chapter improves when Kornfeld briefly describes several sites throughout the region, giving the reader a good feel for the diverse nature of the adaptations. A careful reading, however, shows that the sites he describes span 4600 years (13,000–11,200 CAL B.P.) contained relatively high frequencies of birds, followed by mammals, and smaller amounts of fish. Unfortunately there are no formal comparisons with later components (as we saw in the chapters by Yesner and Collins). Walker does, however, mention that the early component is quite diverse compared to later ones and that deer became more important over time. While Walker does a good job of describing the earlier, diversified assemblage, she does not attempt to explain why it differs from what came later.

Chapter 7 (by Richard Dent) focuses on a site along the Delaware River in Pennsylvania. The early component (roughly 12,900 CAL B.P.) includes a plant assemblage dominated by berries. Those familiar with the work of Lawrence Keeley (1999) would not be surprised by this finding given the low processing costs of fruits. It is difficult to know how berries play out against other plant foods over time, because the early assemblage is not compared to the later ones at the site. Dent also notes that fish were relatively abundant in the early component, but does not mention the role of mammals. As with many of the chap-
ters in the book, he is satisfied to present what appears to be a broad-spectrum diet in some sort of absolute sense, without asking if it was actually narrower or broader than what came later.

Plant foods are also the focus of Chapter 8, where Kandace Hollenbach reviews macrofossil remains from Dust Cave in Alabama. Hickory nuts are dominant in the early component at the site, but again there are no comparisons with later components to show us where they fall on the diet breadth continuum within this environmental setting. Hollenbach discusses the possible role of women given the emphasis on plant use and provides some hypotheses about foraging decisions that may have occurred during the early Holocene.

Chapter 9 (by Lucinda McWeeney) focuses on reconstructing environments along the eastern seaboard using a variety of proxy measures and identifies a series of habitats used by early peoples that have been under-appreciated by most archaeologists. Although indicators like pollen, diatoms, and phytoliths from non-cultural contexts contribute to the analyses, she also uses plant macrofossils from archaeological sites. Most of the chapter provides environmental reviews for various locations, with the apparent goal of setting up useful contexts for archaeologists in the future.

Moving south to Florida, Chapter 10 (by James Dunbar and Pamela Vojnovski) reviews a large number of archaeological assemblages from throughout the region. Multiple time periods are identified only by their local phase names (no dates), so it would be easier for a local archaeologist to appreciate these findings than for someone less familiar with the area. The thrust of the chapter is that there was a great deal of early cultural differentiation that was matched by the diversity of faunal assemblages recovered. Perhaps the most important contribution of the chapter is evidence that some Pleistocene megafauna survived through the Younger Dryas in Florida, making it one of the few refugia known in the New World.

Chapter 11 (by Asa Randall and Kandance Hollenbach) is an interesting discussion of ethnographic analogy and its possible application to Paleoindian studies. After providing a review of the range of theoretical contexts within which ethnographic analogy is traditionally used (e.g., mid-range theory, behavioral ecology, historicist theory), the authors apply these alternative approaches to data from the Middle Tennessee River Valley. They find that Paleoindian lithic technology and its focus on the procurement of large game changed very little over time while subsistence data show an increasing importance of waterfowl, small game, and a variety of plant remains. Whereas the subsistence shifts can be explained using behavioral ecological models, Randall and Hollenbach argue that the historicist perspective might better explain the cultural conservatism that prevented the technology from shifting as well.

Chapter 12 (by Boyce Driskell and Renee Walker) concludes with a good summary of the preceding chapters and a review of the artifact and subsistence data from each region. This review shows that tool kits were largely the same from place to place, while food remains (where these data are presented) show considerable differences across geographic area and through time. Most of the subsistence data show that big game hunting was not a strategy followed everywhere, which is consistent with the overall purpose of the book. Similar to Randall and Hollenbach (Chapter 11), Driskell and Walker are perplexed by the apparent disjuncture between the subsistence variability and the constant, specialized nature of the associated technology.

Overall, I found Foragers of the Terminal Pleistocene in North America to be an interesting book, and it should be required reading for all those interested in Paleoindian adaptations. It achieves its goal by showing that Paleoindian peoples did not focus entirely on big game in all environmental settings and that there was a continuum between large game specialists and broad-spectrum generalists among the earliest occupants of North America. The concept of a continuum is important here, as the data presented in the book demonstrate that early peoples did not have particular adaptations (e.g., one group being a specialist and another a generalist), but that foraging decisions were based on the opportunities and constraints each group encountered.

Explanations for this high level of subsistence variability can be found in previous studies by Nicole Waguespack and Todd Surovell (2003) and Lawrence Keeley (1999) and more generally through the use of optimal foraging theory. Given that the earliest foragers in North America (including those studied in this book) were armed with tool kits designed to hunt large game, Waguespack and Surovell tell us that the frequency at which large game were killed and eaten was based on how often they were encountered. In situations where human populations were small and large mammal populations were high, large game encounters were frequent, and the use of smaller, lower-ranked game was less important. If small bands of people were hunting on an encounter basis, it is not surprising that large game encounter rates were lower in the woodlands of Alabama than in the open plains of Texas or New Mexico and that Paleoindians occupying the former locations were further down the diet continuum even though they were armed and ready to take large game when the opportunity presented itself.

The plant side of the equation is equally conducive to
this analysis, and some of Keeley’s (1999) ethnographic data provide examples that are applicable here. He notes that where large game are readily available, people tend to use only the highest ranking plants (e.g., roots and fruits). When large game are scarce, plants assume a larger role, and more expensive taxa like small seeds and certain nuts are utilized. Important plants described in the current book include various berries and hickory nuts, and it would be interesting to see how return rates for these plants compare to those used in local Archaic components, when milling tools became an important part of the subsistence technology.

The problem of technological conservatism also comes into play and underscores the need to examine local sequences of subsistence remains. Although it is true that small game, fish, and plant foods are found in the early sites and contributed to the diet, the fact that people did not invest in technologies related to these resources should be a warning. Notwithstanding issues of preservation, why are there plant remains but no milling tools, and fish bones but no fishing gear? Andrew Ugan, Jason Bright, and Alan Rogers (2003) try to answer these questions and argue that significant investment in technology should occur only under circumstances where the use-life of a tool is sufficient to overcome the labor costs required in its manufacture. It follows, therefore, that the importance of these resources must have been significantly lower in early periods than was the case during later Archaic times when, as Driskell and Walker note in Chapter 12, changes in subsistence and technology were more tightly linked.

It is worth noting that large game became increasingly important in the Intermontane West during the late Holocene, and I suspect this is also the case for many places farther east (e.g., Wolverton 2005; Chapter 6 this volume). Although improving climatic conditions probably contributed to this change, more sedentary settlement systems linked to specialized, logistical hunting organization also emerged in many places at this time, which allowed hunters to reach high elevation resource patches that were beyond the foraging ranges of the earlier, more residentially mobile groups (McGuire and Hildebrandt 2005). While it is important to consider the interplay between environment and technology, a change in work organization can be as powerful (or even more powerful) than the acquisition of a new tool when defining the effective environment. It seems probable, therefore, that the acquisition of large game in many parts of eastern North America was quite difficult when these animals were taken on an encounter basis by small groups of residentially mobile foragers, but may have become more common later in time with the rise of gender-differentiated work organization.

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Grounding the Past: The Praxis of Participatory Archaeology in the Mixteca Alta, Oaxaca, Mexico

ALEXANDER GEURDS. xiv + 367 pages, 85 figures, appendices, bibliography, index. Leiden, The Netherlands: CNWS Publications, 2007. € 59.00 ISBN 978-90-5789-150-2.

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With Grounding the Past: The Praxis of Participatory Archaeology in the Mixteca Alta, Oaxaca, Mexico, Alexander Geurds produces a text that addresses both applied anthropological and scientific (processual) archaeological method. Geurds establishes several objectives for his work including the identification of archaeological sites and their local toponyms in the Mixteca Alta. His primary interest is the exploration and establishment of “participatory links to [locally] involved communities” [p. 7]. Geurds professes that his argument is a journey of self-reflection in which, chapter by chapter, he becomes increasingly aware of his own “positionality” [p. 202]. Thus, early chapters provide an analysis that adheres closely to the traditional style of an archaeological site report—enumerating the details of structures and associated materials—but the second half of the book explores alternative constructions of the past and the applied anthropological aspects of his investigation.
The sites of the Mixteca Alta, particularly Monte Negro and those of the Apoala Valley, are part of a landscape rich in cultural remains. More than this, however, they are material remains that exist in the space between contemporary society and the past. In this *archaeoscape*, a term which I base on Arjun Appadurai’s (1994 [1990]: 328) “dimensions of global cultural flow,” there is a constant, dynamic construction and reconstruction of the past in which archaeologists, government officials, local communities, tourists, and even Geurds himself, interact to define the meaning of Monte Negro and sites in the Apoala Valley. The recognition of the “stakes” held by these groups is crucial for Geurds because participatory archaeological objectives must function with close attention to established hierarchies of power even as, in the course of interaction, the socially constructed positions of the stakeholders are constantly in flux (Hodder 2003) depending on particular “socio-cultural settings that are often temporally and spatially bound” [p. 154].

In the case of the Mixteca Alta, as in all of Mexico, the National Institute of Anthropology and History (INAH) acts as a force in the protection of national cultural patrimony. Nevertheless, as a regulatory body INAH’s presence in the day-to-day planning and execution of archaeological fieldwork is virtually absent, and their influence within municipalities is limited. In whom authority is vested is dependent instead on other variables—at Monte Negro municipal officials play a dominant role, obliging the local community to accept archaeological fieldwork without consultation, whereas at Santiago Apoala confusion over municipal leadership opened a space for a local resident to act as a representative authority for the community over local archaeological fieldwork. The distinct balance of power that emerges at each site lays the foundation for the evolution of archaeologically-directed local participation. From this foundation all other interactions between the archaeologists and the other stakeholders are shaped, a process that reveals the diversity of interests held by the local community. For Geurds, even the concept of the unified “community” is challenged through this process, revealing instead a “heterogeneous [group] of individuals, many of which have strong personal agendas that only occasionally are made visible to the outsider archaeologist” [p. 178].

Geurds’ interest in examining participatory archaeology does not, however, extend to his presentation of archaeological data. In Chapter 3 he illustrates, both in words and images, the results of site-based mapping at Monte Negro. Located on an easily defensible hilltop, Monte Negro consists of nine residential units, four plazas, and several public structures, many of which were excavated by Alfonso Caso in the late 1930s. While the facts of these features are laid out, analysis stops at detailed description, never envisioning the site as a whole “system” in which the structures’ meanings are mutually dependent. Discussion of the valley-based survey of the Apoala Valley in Chapter 4 is similarly anticlimactic as each small site is presented with measurements and basic accounts of its features and material remains. The reader is left to ascertain the meaning of the survey in the context of a book whose title suggests participation was an essential element of the collection of archaeological survey data.

In the second half of the book Geurds makes a radical turn away from traditional archaeological description to a post-processual “deconstruction” of community participation. Successful archaeological practice, he astutely points out, is dependent on research that is both significant and interesting to local people and descendent groups. It is contradictory to the nature of participatory practice to paternalistically force the involvement of local communities in order to define a project as community-based. Local people must choose the form and extent of their participation and in truly participatory research—a process defined by some researchers not as participation but as “collaboration” (Chambers 2004: 204)—help define research goals so that they become equal stewards in the process of archaeological investigation.

Still, according to Geurds, the initial encounters between archaeologists and local people are embedded within preconceptions on both sides. To the residents of the Mixteca Alta, outsiders, particularly archaeologists, are understood simultaneously as a source of income and as a threat to the autonomy of a community over its lands. The distance traveled by researchers from the United States or Europe, a distance which is perceived by the locals to be much greater and more economically arduous than it appears to the foreign scholars, is evidence of the material gains archaeologists seek. This is a common sentiment, not just in the Mixteca Alta, but in areas throughout Mesoamerica, particularly because archaeologists are often seen removing objects from the land without providing any explanation of their objectives. In my own fieldwork in Guatemala and Belize, I have heard countless rumors of archaeologists who, it is said, upon finding valuable pieces of gold or jade, concealed them from the community and sold them for profit. Geurds experienced the same mentality in Santiago Apoala when residents concluded that the prolonged absence of a man from the United States who resided for an extensive period of time on the outskirts of the community indicated that he must have purchased illicit antiquities to take back to his country. A conviction that foreigners could “trick” local people into cooperating
against their will is a significant factor hindering the development of trusting relationships between archaeologists and local residents.

While the establishment of trust in the Mixteca Alta was slow and uneven, once established it was essential to the acquisition of what Geurds calls “temporary insider status,” a stage of interaction at which a higher form of trust and participation is achieved. To achieve this status, dialogue between archaeologists and people at Monte Negro and Santiago Apoala took place through individual interactions, visits with primary school students, site tours, and radio interviews on the local program La Voz de la Mixteca (The Voice of the Mixteca). The form of communication valuable to both the archaeological project and the community, however, was the exchange begun via a toponymic survey of the Apoala Valley.

In their 2004 field season, the archaeologists included among their participatory objectives a desire expressed by local residents to create a register of oral traditions connected to the cultural and natural features of the area. Their interest in registering local toponyms was, in large part, associated with territorial ownership. Because territories are often delineated with reference to the natural and cultural features along their borders, they are commonly misinterpreted or disregarded by municipal authorities. These discrepancies provided motivation to create a more permanent map of the toponymic boundaries between territories.

Together, foreign archaeologists and their local collaborators collected over 200 place names in the Apoala Valley, the highest concentration of which were found in the mountainous and liminal areas along the border of Apoala territory. Both ancient and contemporary cultural sites were identified but their cultural geography was not separated by the precolonial/postcolonial division belonging to archaeological time periods. Instead, contemporary sacred places often overlap with sites of precolonial activity. The realization that different forms of knowledge exist regarding the same cultural sites is, for Geurds, an important result of participatory archaeology.

Despite the importance Geurds places on the toponymic survey in participatory archaeological practice in the Mixteca Alta, there is an inherent contradiction in his presentation of this material. The data acquired from traditional archaeological survey are dealt with extensively in the initial chapters of the book, yet there is no mention of the toponymic data which were collaboratively acquired and represent some of the same prehispanic sites. The separation of the “scientific” survey from the survey of oral traditions suggests that these different forms of knowledge are, in fact, not of equal importance within the archaeological project, and that oral histories are not an adequate way of describing archaeological remains. This separation of applied anthropological method from archaeological investigation is a consistent feature of Geurds’ text. Grounding the Past is not a book that cohesively addresses participatory archaeology, but is rather two books, one assessing archaeological data and structural conservation, the other analyzing interactions between stakeholders and descriptions of local toponyms. It is up to the reader to build bridges between Geurd’s descriptions and analyses in order to understand the meaning of the text, without which the positive contributions Geurds makes to participatory archaeology and the precolonial Mixteca Alta are obscured.

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