

Shell Mounds and Hunter-Gatherers in Prehistory

Any one [*sic*] who for the first time views the larger ones [shell mounds] . . . might well be excused for doubting that such immense quantities of small shells could have been brought together by human labor. . . . It is, however, absolutely impossible that such quantities of shells and such combinations of objects could have been the result of natural causes. It is impossible too to escape the conviction that these deposits of shells, and the remains of the various animals they enclose, were collected in any other way than as the refuse portions of articles of food. If the object of the Indians had been merely to construct a mound, materials for this in all cases could be had, as with the burial mounds, by scraping together sand from the neighborhood, and which even if brought from a considerable distance, would involve far less time and labor than the slow gathering of shells from beneath of the waters of creeks and lagoons.

Jefferies Wyman,
Fresh-water Shell Mounds of the St. John's River, Florida

Jefferies Wyman wrote a draft of the preceding passage in 1871 while resting atop the largest shell mound in northeast Florida. During numerous trips to the St. Johns basin he had explored scores of shell sites—long thought to be natural features—in search of evidence for their anthropogenic origins. In the span of a few sentences, Wyman deftly summarized his empirical observations, provided an explanation for the occurrence of shells intermixed with objects and faunal remains, and introduced a fundamental distinction between shell sites and burial mounds composed mostly of sand. Throughout the monograph Wyman described shell sites and presented a chronology of shell-site occupation based on objects, stratigraphy, and paleoenvironmental indicators.

At the time of publication, Wyman's research was cutting-edge archaeology (Lyman and O'Brien 1999; Stoltman 2004). Not only did he wrest human-made shell sites from the annals of the natural sciences, but Wyman arguably set the agenda for future archaeological investigations with the following conclusions:

- (a) the freshwater shell mounds of the St. Johns River were habitation sites that accumulated through refuse deposition, that is, they were not intentionally constructed;
- (b) changes in the river had influenced their location through time; and
- (c) shell sites were phenomena of slow accumulation, whereas sand burial mounds were eventful and purposeful.

In time, the shell mound/sand mound dichotomy would be turned into a chronological axiom: sand mounds had to post-date shell mound accumulation. (This last point will be explicated in full later in this chapter.)

Wyman should be required reading for anyone interested in shell sites (Trigger 1986). Modern-day researchers would find Wyman's conclusions very familiar regardless of whether they have read them before; his assumptions permeate contemporary thought regarding shell sites, ancient hunter-gatherers, and landscape use.

Wyman cannot solely be faulted for these assumptions; he and others were deeply influenced by the writing and lectures of Adolph von Morlot, a Swiss naturalist (Bourque 2002). Morlot introduced the study of Danish shell sites, which he referred to as *kjökkenmødding*, to the English-speaking world (e.g., Morlot 1861). *Kjökkenmødding* translates into "kitchen refuse," and Morlot (paraphrasing Danish researchers) provided a specific interpretation of their formation:

Here was then unmistakably the refuse of repasts, lying confusedly mingled with the remnants of the primitive mechanical inventions of a people that had resorted to the sea-shore in the most remote antiquity, living on fish and game. These remnants and refuse, accumulated in one spot during a long series of centuries. . . . (Morlot 1861: 292)

Wyman accepted much of the Danish interpretations and methods of investigating *kjökkenmødding* sites, which continue to be influential today globally (Álvarez et al. 2011; Balbo et al. 2011; Gutiérrez-Zugasti et al. 2011).

An argument can also be made that Wyman was an early adopter—and likely an important promoter, in his capacity as curator of Harvard's Pea-

body Museum of Ethnology and Archaeology—of a new kind of archaeology which centered on *prehistory* (Bourque 2002). Prehistory did not exist until 1851 (Chippendale 1989), but the concept and its implications spread quickly. In the middle of the nineteenth century, prehistory was viewed as a science whose purview was the time before history (e.g., prior to written records), and which drew upon uniformitarian theory and the time scales of geology, progressive social evolution, and the comparative approach of ethnology (e.g., Lubbock 1865; Morlot 1861: 284–285).

Three assumptions of nineteenth-century prehistory are noteworthy:

- (1) the pre-literate past provided evidence for the evolutionary progress of humanity, which was often segmented into particular stages (so-called stadial schemes) ordered chronologically from simple to complex;
- (2) contemporary (non-Western) societies provided a model for pre-industrial lifeways; and
- (3) the ancient past proceeded on geological time scales.

Accordingly, ancient shellfishing hunter-gatherers are best understood in subsistence terms, their histories akin to earth processes (see Sassaman 2010a: 1–5). Or, as stated by Wyman with respect to shell sites the north-eastern United States, “Shell-heaps have become intimately associated with the question of the age of the human race, a question which has passed out of the domain of the written, into that of geological history” (Wyman 1868: 570). Thus, while not geological phenomena per se, shell sites should still be understood in geological terms.

This book is about understanding shell sites and Archaic hunter-gatherer communities as historical. However, my thesis presupposes that hunter-gatherers have histories in the sense outlined in the Introduction. Instead, Mount Taylor communities, and their hunter-gatherer equivalents elsewhere, have been treated as decidedly prehistoric phenomena.

To understand why prehistory is the dominant paradigm, we first need to understand how Mount Taylor shell sites became subjects of prehistory in the first place. That is, how were Mount Taylor communities, and their global equivalents, reduced in anthropological thought to evolutionary phenomena through the “conceptual straightjacket” (Sassaman 2010a: 3) that is prehistory?

What I aim to show in this chapter is that the interpretation of shell sites as refuse, and hunter-gatherers as ahistorical, is not a natural or inescap-

able conclusion. Instead, these conclusions are the product of modern (i.e., Western) traditions of historiography (the writing of history) that emphasize linear concepts of time and progressive notions of social change, such that chronologically early cultural traditions are also the simplest and most directly affected by the environment. These models reduce social phenomena (collecting and depositing shell) into categories (hunter-gatherer) that match contemporary concerns and worldviews.

This chapter provides a critique of prehistory as applied to Mount Taylor shell sites specifically, and shellfishing hunter-gatherers in general. Although not typical for research on hunter-gatherers in North America (Sassaman and Randall 2012a), I am convinced that critical evaluation of the history of investigations can provide important insights. What I demonstrate is that a series of empirical and conceptual contradictions to orthodox models have emerged in the past twenty years. These contradictions tell us more about how hunter-gatherers have been framed theoretically than about what happened in the past.

In this chapter, my method is to tack between the archaeology of shellfishing and the history of thinking about hunter-gatherers. I first provide a brief introduction to Mount Taylor archaeology by situating middle Holocene shellfishing in local, regional, and global perspectives, and outline the interpretive traditions that have framed investigations of those archaeological records. I then introduce non-eventful histories, which correspond to the concept of prehistory.

Shifting back to the St. Johns basin, I examine how Archaic shell mounds were documented and interpreted by Wyman and his contemporaries. Importantly, many of the assumptions regarding ancient shellfishers today can be identified in these early works. Most notably, by determining that shell mounds were refuse heaps, Wyman unwittingly introduced a dichotomy between mundane and sacred. Later scholars would arrange this dichotomy into an axiomatic model of social development. This dichotomy continued to be reproduced despite data suggesting certain mounds were purposefully composed.

I continue by showing how the notions of prehistory that were documented on the St. Johns had analogues in anthropological theory that regarded hunter-gatherers as something fundamentally different than non-foragers. I conclude by considering the current evidence that supports a social explanation for the shellfishing phenomena in the Southeast, and the debate that this evidence has engendered among twenty-first century scholars.

Situating Mount Taylor and Other Middle Holocene Shellfishing Traditions

The emergence of shellfishing has long captivated the archaeological imagination, from the earliest shell-site investigations in Denmark to explorations of the phenomenon worldwide today. Until recently, shellfishing was thought to be an innovation specific to the middle-late Holocene. Worldwide studies show an apparent increase in riverine and coastal settlement centered on aquatic exploitation roughly 7,000 years ago (Bailey and Parkington 1988; Nicholas 1998). In many cases, aquatic intensification emerges with other aspects considered emblematic of social complexity: status inequality, relative settlement permanence, storage, and technological innovation (Price and Brown 1985). A number of arguments have been marshaled to explain this chronological and social pattern. Some of the more popular include the irresistibility of newly established aquatic resources (Brown and Vierra 1983); competition over scarce terrestrial resources (Charles and Buikstra 1983); appropriation of surpluses and competitive feasting in the context of abundant resources (Hayden 1994, 1995); or group fragmentation, increased settlement permanence, and technological specialization and efficiency in tension zones (Binford 1968, 1990).

Resource-first explanations of shellfishing and its consequences are fundamentally based on the role of environmental processes attendant to sea-level stabilization and riverine reorganization that provided abundant resources that could be exploited. That is, environmental change enabled new subsistence economies, which altered population dynamics resulting in eventual social transformations. The temporal foundation of these models, however, has been undermined by recent discoveries of pre-middle Holocene shellfishing. We now understand that the apparent Holocene increase in intensive aquatic economies worldwide is the result of preservation bias (Álvarez et al. 2011; Bailey and Flemming 2008). It is not until the middle Holocene that sea level began to stabilize, meaning that many coastal sites pre-dating the middle Holocene were either destroyed or submerged during marine transgression. Archaeologists are only now beginning to rethink the antiquity of shellfishing and its implications for human development and global colonization (see subsequent sections below).

A review of the record for shellfishing in the southeastern United States indicates that *intensive* shellfishing, particularly with respect to riverine ecosystems, emerges by at least 9,000 years ago. The timeframe encompassed by

early shellfishing in the greater Southeast coincides with the Middle and Late Archaic periods, often portrayed as a time of increasing economic specialization and technological innovation, decreasing mobility, and widespread exchange (Bender 1985; Brown and Vierra 1983; Jefferies 1996; Marquardt 1985; Sassaman 1996). When intensive shellfishing does emerge during the Middle Archaic, it is present in only a few locations (figure 1.1).

Coastal or estuarine shellfishing has been identified at a handful of locations in Florida. Dates between 7200 and 6000 cal BP have been recovered from marine shell bearing strata in the Mitchell River I site on Choctawhatchee Bay in the panhandle, in southwest Florida at Useppa Island within Charlotte Harbor and Horrs Island in the Everglades, and at the Spencers Midden site near the mouth of the St. Johns River in northeast Florida (Saunders and Russo 2011). A possible marine shell matrix deposit has also been documented at the J&J Hunt site, which is an inundated locality off the Gulf Coast of the panhandle (Faught 2004). Whether coastal/estuarine shellfishing was limited to these localities, or was an extensive tradition of which these are the only remaining record, remains unknown. Until the late twentieth century, archaeologists thought that coastal shellfishing did not emerge until the late Holocene. They argued that ecological instability precluded intensive exploitation of coastal resources (e.g., Goggin 1952: 21). The visibility of shellfishing increases during the Late Archaic and Early Woodland, when shell sites are present along most of the southeastern coastline (Russo 2010), and the coasts continued to be heavily exploited until the time of European incursions (Thompson and Worth 2011).

Interior riverine exploitation is centered on the Ohio River Valley and the St. Johns River Valley (figure 1.1). Shellfishing emerged as early as the ninth millennium in the Midsouth (Claassen 2010: 5; Dye 1996). The most widely recognized tradition is the so-called “Shell Mound Archaic” (SMA), a term originally applied to all shell-bearing sites dating to the middle Holocene. SMA is now preferentially used to refer to shell matrix sites of the Ohio River Valley (Sassaman 2004b). Particularly high densities of shell mounds and small shell sites have been documented along the Ohio River, the Green River, the Cumberland River, and the Tennessee River and certain tributaries (Claassen 2010; Marquardt and Watson 2005).

Much of what we know about SMA sites comes from Works Progress Administration (WPA) era river basin surveys conducted in the 1930s and 1940s. Many of the largest shell sites contain human burials, often in addition to thermal features, objects and tools fragments, and food remains. These places are most frequently interpreted as village sites, although many contain