ARCHAEOLOGIES of colonialism in Native North America have diversified and intensified over the last two decades, ranging across numerous regions, periods, datasets, and theoretical perspectives. Central to many of these studies has been an attempt to understand the nature of culture change and continuity within indigenous groups when they encountered, resisted, persisted within, and suffered under various colonial fronts. Moving beyond the simplified and problematic frameworks of “acculturation” that structured many interpretations from the 1950s to the late 1980s has led to new questions about how indigenous people and communities negotiated colonial and settler worlds, and their identities and places therein (Ferris 2009; Jordan 2008, 2009; Liebmann 2012; Lightfoot et al. 1998; Loren 2008; Panich 2013; Silliman 2005, 2009, 2012). Many of these have shifted focus from things to the practices that incorporated those things.

In recent years, the archaeology of Native American sites in colonial contexts has increased our understanding of how indigenous communities persisted in challenging times. Greater attention to practices helps to create a more enriched picture, especially when set in the context of food and consumption. This article considers shellfish remains excavated from three households on the Eastern Pequot reservation, located several kilometers inland from the Connecticut coast in southern New England, to explore the role that shellfish gathering played in eighteenth-century subsistence and social practices in Native New England. Household variability in the specific species and quantity consumed, as well as disposal methods, provide insight into internal community decision making. Moreover, eighteenth-century reservation demographics strongly accentuate the role of women in the provision of these foodstuffs and in maintaining cultural connections to the coast and other off-reservation communities. Practices of gathering and consuming shellfish thus provide vectors of change and continuity in Native American communities of colonial New England, showing how these practices represent not only connections to a deeper past, but also ongoing and even resurging practices to engage with a colonial present.

In años recientes, la arqueología de sitios nativo americanos en contextos coloniales han aumentado nuestro entendimiento sobre como han persistido las comunidades indígenas durante épocas de dureza. Mayor atención a la práctica, ayuda a crear una imagen más enriquecedora, especialmente dados los contextos alimentarios y consumo. Este artículo considera los restos de caracol excavados en tres unidades de vivienda en la reserva de Eastern Pequot, localizado a varias millas de la costa de Connecticut al sur de la Nueva Inglaterra, para explorar el papel que la recolección de caracol jugó en la subsistencia y prácticas sociales de la Nueva Inglaterra del siglo XVIII. Variabilidad doméstica y cantidad en las especies consumidas, al igual que los métodos de disponer de ellos, proveen entendimiento sobre la toma de decisiones internas de la comunidad. Además, la demográfica de las reservaciones del siglo XVIII acentuaban grandemente el papel de las mujeres en proveer dichos alimentos y en mantener conexiones culturales con la costa y comunidades fuera de la reserva. La práctica de la recolección y consumo de caracol provee entonces vectores de cambio y continuidad de comunidades nativo americanas de la Nueva Inglaterra colonial, demostrando como éstas prácticas representan no solamente conexiones a un pasado profundo, pero también la continuidad e inclusive el resurgir de prácticas para enfrentar el presente colonial.
As with archaeological studies around the world, food remains are a key line of evidence for assessing these changes and continuities in Native North America. Publications have ranged across a number of research areas, such as the role of Old World livestock in Native American economies (Pavao-Zuckerman and Reitz 2011), reorientation of indigenous hunting practices within colonial contexts (Lapham 2005; Pavao-Zuckerman 2007; Wake 1997), and varied negotiations of identity and culture through food by indigenous groups who were in periodic contact with Old World colonists and their settler descendants (Cipolla 2008; Gifford-Gonzalez and Sunseri 2007; Graesch et al. 2010; Lightfoot et al. 1998; Pavao-Zuckerman and LaMotta 2007). Others have turned the same critical view to colonists themselves (Dawdy 2010; Scott 2007). In all cases, archaeologists have been able to tease out interesting dimensions of identity, gender, and culture within the otherwise universal need for sustenance.

This article joins the discussion through the examination of shellfish use as it relates to food, gender, and community on the Eastern Pequot reservation in southeastern Connecticut. The 225-acre reservation is located roughly 10 km from the coast and has been occupied since its founding in 1683, making it one of the oldest reservations in what is now the United States (Figure 1). We consider Eastern Pequot use of shellfish at the end of the eighteenth century by comparing three sites on this reservation and situating shellfish consumption in local household strategies of persistence and in regional contexts of physical and cultural landscapes, legal boundaries, environmental resources, and gendered practices and demographics.

This research has four objectives. First, it advances the study of Native American communities well beyond the first century of colonialism and “contact” with Europeans so that long-term trajectories can be properly understood. This means situating studies of later colonial periods in truly diachronic frameworks that incorporate the time...
before colonialism (Ferris 2009; Lightfoot 1995; Oland et al. 2012; Scheiber and Mitchell 2010; Silliman 2009, 2012). This focus also requires more attention to “middle periods” that provide critical temporal and cultural links between the earliest colonial contexts and the contemporary world of Native America today. This point has been argued by Lightfoot (2006) and can be illustrated by the recent work being done on the market economies of the late eighteenth and early nineteenth centuries (Greene and Plane 2010; Silliman and Witt 2010).

Second, the project emphasizes variation within an indigenous community and highlights how the everyday decisions of community members reflect not just concerns with colonists and settlers, but also internal diversity. Recent archaeological studies of religious revitalization movements (Liebmann 2008, 2012; Wagner 2010) and community politics (Wesson 2008, 2010) highlight such intracommunity struggles, but internal differences were equally evident in everyday decisions about economy, food, housing, and object use. This variation is seen by comparing several contemporaneous households in a community. Attention to individuals without attention to comparative contexts can lead—often unintentionally—to false generalizations about individual choices and variability. This can be especially problematic if social dimensions like gender are overlooked, since these can be fundamental to internal community and household variations. Approaching the question through a multisite perspective similarly helps to avoid the “one site against the world” approach criticized recently by Jordan (2010), who appropriately identifies the problem of archaeologists short-changing entire political economies when they conduct only single-site studies.

Third, this research aims to upgrade shellfish data from its complementary, if not ancillary, role in archaeological studies of historical Native American diets. Shell usage spans several millennia on North America’s coasts (e.g., Bernstein 2002; Kerber 1996; Spiess and Lewis 2001; Stein 1992; Thompson and Worth 2011; Widmer 1989), but it often fades from view in the archaeology of more recent periods, other than some classic studies on seventeenth-century New England such as Salwen (1970) and Williams (1972). The obvious exception is wampum (shell bead) production in which shell was the raw material, not the food (see recent summary in Bradley 2011). That said, some archaeological studies have documented shellfish use on eighteenth-century sites not occupied by Native Americans (Harper et al. 2001), which adds additional historical context.

Most of the scholarship on shellfish use focuses on large shell middens that extend several meters deep and cover hundreds of square meters, contexts where shellfish were intensively harvested and processed over hundreds or even thousands of years. This work frequently considers environmental reconstruction, settlement patterns, site formation processes, culture historical reconstruction, and more recently, social aspects of use and formation (Claassen 1998; Sassaman 2004; Stein 1992; Wassell 1987). We seek to expand beyond ecological and economic considerations by highlighting shellfish procurement at household scales of space and time and informed by land access, traditional practices, and social memory (see similar point, but different scale and region, in Sassaman 2004). Indeed, shellfish gathering could serve as a way to connect with and pass on personal, family, and community histories and practices—that is, to participate in both the rootedness of habitus and its malleability in new contexts.

Fourth, we use a gendered lens for understanding the shellfish remains, landscape context, demographic variables, mobility restrictions, and economic parameters of Eastern Pequot life in the late eighteenth century. This perspective proved to be the most revealing given the particular cultural and historical practices of shellfish procurement and consumption, not because we approached the project as a “study of gender” from the outset. That is, we chose to work upward from the materials and the practices they represented into the social arenas that gave them the most salience. Studies have already demonstrated the value of gender as a fundamental experience and social vector for understanding the routes of colonialism into various indigenous societies, especially considering the ways these vectors intersected with sexual–gender divisions of labor and economy (e.g., Frink 2009, 2010; Silliman 2001; Spector 1993; Trigg and Landon 2010; Voss 2008). In addition, we use our specific datasets and cultural contexts to build on anthro-
pological studies of gender already established in the archaeology (Nassaney 2004; Rubertone 2001) and ethnohistory (Bragdon 1996, 2009; Den Ouden 2005; Richmond and Den Ouden 2004) of Native peoples in New England.

To achieve these four objectives, we emphasize daily practices both on and off the reservation that formed the archaeological contexts on the Eastern Pequot reservation. The individuals responsible for these practices adapted to, accommodated, resisted, and at times were marginalized by the meetings of colonial and indigenous ways of life. Moreover, these individuals had their own preferences and skills, leading to variable experiences and practices within certain confines of technology, politics, and social expectations. Attention to both the long-term histories of colonial entanglements and small scale, day-to-day activities of procuring, preparing, and consuming meals within the life-span of single individuals and households helps to capture the full range experiences.

Background

The Eastern Pequot reservation is located in the present-day town of North Stonington, Connecticut (Figure 1). It was established in 1683 by the Colony of Connecticut for a complex, sometimes contradictory, set of reasons. The Pequot were a formidable cultural and economic presence in southern New England when they began interacting with Dutch and English traders in the early seventeenth century. They practiced mixed horticulture, blending riverine valley agriculture and village horticulture with hunting, gathering, fishing, and shellfishing along the southern Connecticut coast, especially in the Long Island Sound. They primarily lived in large coastal villages with regional leaders known as sachems, although at times they occupied inland seasonal camps (Dincauze 1990; McBride 1994). However, major disruption came in the aftermath of the Pequot War of 1636–37 when English settlers struck a harsh military defeat (Cave 1996; Hauptman 1990). The English had intended the military defeat, signaled by the Treaty of Hartford in 1638, to also be a cultural defeat as they executed some survivors, sold others into slavery in the Caribbean, placed the remaining Pequot under the oversight of the Mohegan and Narragansett who had allied with the English in the war, and declared the Pequot extinct as a name and a people (Cave 1996; Salisbury 1984).

However, this attempt at cultural conquest failed because of the resiliency of Pequot survivors and the resolve of their leaders who sought sovereignty, recognition, and land rights from the Colony of Connecticut (Den Ouden 2005; McBride 1996). Careful negotiation and constant struggle resulted in the formation of the Western Pequot reservation at Mashantucket in 1666 and the Eastern (Pawcatuck) Pequot reservation at Lantern Hill in 1683 (Figure 1). The creation of reservations served to spatially and symbolically set apart a “conquered people” within a growing colonial presence in the region, while simultaneously recognizing the demands of groups asserting their rights and sovereignty (Campisi 1990; Den Ouden 2005). This was the colonial solidification of a divide in this once-united Pequot group, although intermarriage and cross-residence occurred frequently in the following centuries.

As Den Ouden (2005) has argued for the seventeenth and eighteenth centuries and archaeological evidence has shown for the eighteenth and nineteenth centuries (e.g., Cipolla 2008; McBride 1990, 1993, 2005; Silliman 2009, 2012), conquest in a military sense was not a final blow to either Pequot group. “For Native communities in eighteenth-century Connecticut, reservations were embattled spaces, but they were also the locus of community regeneration” (Den Ouden 2012:3). Community residents continued to file petitions to the colonial and then state governments about land encroachment and overseer problems, and they continued to occupy their reservations for centuries with a range of houses and material goods that indicated their persistence and their participation in the local and global economies (Hayden 2012; Silliman 2009; Silliman and Witt 2010).

Both Pequot communities continued into the twentieth century with similar trajectories until the early 1980s when the Mashantucket Pequot received Federal Acknowledgment by the U.S. government, which prompted archaeological and historical research as well as significant economic development (Hauptman and Wherry 1990; McBride 1990). Twenty years later after extensive research and paperwork, the Eastern Pequot Tribal Nation also received a preliminary positive find-
ing for Federal Acknowledgment but had it unexpectedly overturned through a variety of controversial political maneuvers (Silliman and Sebastian Dring 2008). Despite these political and economic setbacks, the Eastern Pequot Tribal Nation has developed a strong commitment to cultural and heritage preservation and the role of archaeology in assisting with that endeavor.

Since 2003, the second author, in a coordinated effort between the University of Massachusetts Boston and the Eastern Pequot Tribal Nation, has conducted nine field seasons of archaeological research on the reservation, which has provided information about eighteenth- and nineteenth-century life on the reservation while also exploring the potentials of collaborative, community-based archaeology (Silliman and Sebastian Dring 2008).

We focus here on the intersections of consumption with landscapes and environments through a consideration of three household sites. Shellfish remains are an understudied but abundant material dataset recovered during excavations on the Eastern Pequot reservation. When complemented with the faunal analysis done on a sample of excavated sites (Cipolla 2005, 2008; Cipolla et al. 2007; Fedore 2008; Williams 2014), we consider how shellfish were integrated into larger systems of subsistence and daily life set within the inescapable larger political and economic circumstances created by European colonialism.

On a broader scale, shellfish consumption and marine resource gathering were part of larger Pequot cultural traditions related to intercommunity and regional social ties in southern New England. As a result, continued (or renewed) shellfish gathering and consumption may have served as a way of maintaining culturally significant practices in a changing and often volatile world. These practices were frequently tied to gender- and age-based roles (Claassen 1998; Waselkov 1987:98–100), especially as evidenced by a few historical accounts and their subsequent analysis specific to this region (Bragdon 1996:110–112; Nassaney 2004:342; Williams and Bendremer 1997:38–39). For example, Roger Williams (1973 [1643]:210) in the early seventeenth century recorded that Narragansett women of nearby Rhode Island labor “in the field, in carrying the mighty burdens, in digging clammes and in getting other shellfish from the sea.” Although one cannot be certain that such observations represent the full range of practices, or that these practices continued unchanged throughout the reservation period, this observation opens a venue for considering shellfish within the context of gender.

### Study Parameters

On the Eastern Pequot reservation, the majority of sites excavated to date include structural remains of a house—cellars, crawlspace, collapsed rock chimneys, postholes, and/or foundation stones, depending on the type of structure and its dates—along with associated features and artifact scatters. This analysis focuses on two discrete middens with high percentages of shellfish remains at two sites and one additional site with a significant quantity of shells in a general refuse midden. Unlike many of the classic archaeological shell midden sites, which extend over tens or hundreds of meters and were used for decades by whole communities, all shellfish remains on the Eastern Pequot Reservation come from relatively small (under 10 m²) household-scale deposits, which contained shell mixed with other domestic refuse.

The three sites under consideration are identified below by their official State of Connecticut site designations but are not shown together on one reservation map in this article to respect the wishes of the Eastern Pequot Tribal Nation about site privacy. These sites were occupied for approximately 20–40 years during the mid- to late eighteenth century, with the earliest occupied no earlier than 1740. Only one of the three house sites shows any architectural or spatial reconfiguration during its occupation (Table 1). This tight date range—equivalent to one or two generations—allows greater resolution of the daily practices conducted by specific sets of individuals, the nature of meal composition in their homes over individual lifetimes, and synchronic variability between households. Even though three houses may provide an empirically small sample, they offer a reasonable representative sample of the reservation at this particular time since eighteenth-century petitions tended to record fewer than 250 individuals on the reservation and at times as few as 30 (Den Ouden 2005:29; Mandell 2007:4).
Excavated in 2007, Site 102–124 represents a small (~ 200 m²) residential area near the center of the reservation discovered entirely through subsurface sampling. Three features with mixed faunal and artifact deposits contained significant quantities of remains from cows and pigs, marine fish, shellfish, and other foods (Fedore 2008; Hunter 2012). A 4 m² general refuse midden area contained 74 percent of the shellfish excavated from the site, with the rest spread out across an additional 14 m². The core midden feature contained higher quantities of artifacts and faunal materials than the shell-dominated features at the other two sites.

Site 102–123, excavated in 2005 and 2006, is located less than 100 m north of Site 102–124 (Hollis 2013; Silliman 2009). Two 1×1-m units were excavated to a depth of .6 m in the approximate center of a rock pile that capped and infiltrated the underlying refuse deposit. We estimate that this represents about a 50 percent sample of this midden feature. This midden feature existed as a distinct deposit about 7 m east of the main household itself.

Site 102–126, excavated in 2011, is located approximately 450 m southeast of the other two sites. All shells discussed here derive from the refuse midden located to the southeast of the house (Hunter 2012). The feature contains a pit covering approximately 1.5 m² with approximately .5 m² of sediment and very little rock matrix, and is overlain by a larger refuse deposit which extends up to 3 m north–south and 2 m east–west and to a maximum depth of 45 cm. Excavations removed approximately 80 percent of the entire feature, as determined by visible feature edges in excavation units and some remnants visible in sidewalls and extending into two unexcavated units.

All three sites contained similar material culture, including redware, white salt-glazed stoneware, white ball clay pipe fragments, bottle glass, glass beads, metal buttons, iron nails, lithic flakes, and other materials. Differences in the ceramic assemblages, both in terms of presence–absence (e.g., creamware, agateware, Astbury) and in proportion, helped to refine the dates for these assemblages. All three sites lack macrobotanical remains in any reasonable quantities, unfortunately, despite extensive soil sampling and flotation, and this leaves us unable to situate the shellfish within the full menu of these households.

### Results

The shells from all three sites were recovered via dry-screening through 1/8-inch mesh. For a portion of the midden at Site 102–123, all materials that did not pass through the screen were bagged and sorted in the laboratory because in-field sorting became noticeably inefficient. For the remaining portion of this midden, and those at Sites 102–124 and 102–126, all materials (shell and nonshell) were collected during screening, including very tiny fragments. The collected shell from both sampling methods was cataloged and identified by the first author with use of comparative collections and reference materials, as well
than 8,400 hinges, including, in order of highest weight in the aggregate, soft-shell clam (Mya arenaria), hard-shell clam (Mercenaria mercenaria), and several inlets and harbors near Mystic, Groton, and the southern portions of Stonington, all within a day’s travel (8–13 km one way) on foot or by horse from the reservation.

Site 102–124

Shells, other faunal material, and artifacts were well mixed throughout the entire depth of the midden pit, which extended approximately 60 cm below the present ground surface. Aside from a higher number of fish bones within the midden, where preservation conditions tended to be better, the shell and faunal representation within the midden was largely the same as in the general site assemblage. Hard-shell clams were the most prevalent bivalve species by weight, contributing 66 percent of the midden shell weight and 62 percent of the site total, while soft-shell clams were most common when considering hinge counts with 60 percent of the midden shells and 54 percent of the site total (Table 3). This difference likely was influenced strongly by the thicker, denser shells of hard-shell clams, combined with the fact that the valve portion of soft-shell clams tend to preserve quite well (Lightfoot and Carrato 1988). When one considers available biomass, hard-shell clams contributed approximately 121 g and soft-shell clams 71 g, while vertebrates supplied 8,850 g, 339 g of which derived from fish. Domesticates, primarily cows and pigs, provided the bulk of the edible biomass, indicating that while these animals served as dietary staples, aquatic resources offered a small but not uncommon contribution (Fedore 2008:44–49).

Table 2. Total Shell Weight (g) from Three Sites on the Eastern Pequot Reservation.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Taxon</th>
<th>102–124 Site</th>
<th>102–123 Midden</th>
<th>102–126 Midden</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oyster</td>
<td>Crassostrea virginica</td>
<td>69.6</td>
<td>351.5</td>
<td>8,753.4</td>
<td>9,174.5</td>
</tr>
<tr>
<td>Hard-Shell Clam</td>
<td>Mercenaria mercenaria</td>
<td>512.7</td>
<td>1,263.5</td>
<td>1,047.3</td>
<td>2,823.5</td>
</tr>
<tr>
<td>Soft-Shell Clam</td>
<td>Mya arenaria</td>
<td>198.9</td>
<td>22,735.3</td>
<td>3,916.4</td>
<td>26,850.6</td>
</tr>
<tr>
<td>Mussel</td>
<td>Mytilidae</td>
<td>5.3</td>
<td>585.7</td>
<td>420.6</td>
<td>1,011.6</td>
</tr>
<tr>
<td>Scallop</td>
<td>Argopecten irradians</td>
<td>1.8</td>
<td>—</td>
<td>.2</td>
<td>2.0</td>
</tr>
<tr>
<td>Whelk</td>
<td>Busycon sp.</td>
<td>—</td>
<td>—</td>
<td>43.8</td>
<td>43.8</td>
</tr>
<tr>
<td>Atlantic Surf Clam</td>
<td>Spisula solidissima</td>
<td>2.1</td>
<td>—</td>
<td>17.9</td>
<td>20.0</td>
</tr>
<tr>
<td>Unidentified</td>
<td></td>
<td>33.4</td>
<td>2,074.8</td>
<td>242.0</td>
<td>2,350.2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>823.8</td>
<td>27,010.8</td>
<td>14,441.6</td>
<td>42,276.2</td>
</tr>
</tbody>
</table>
The assemblage at 51.2 percent of the shell weight, followed by soft-shell clam at 25.1 percent of the shell weight, with smaller amounts of mussel

Muscle — 120 — 1.7 — 585.7 — 2.2 — 293

weight, followed by soft-shell clam at 25.1 percent of the shell weight, with smaller amounts of mussel,

Table 3. Shell Data from Site 102–124.

<table>
<thead>
<tr>
<th>Species</th>
<th>Count</th>
<th>Percent by Count</th>
<th>Weight (g)</th>
<th>Percent by Weight</th>
<th>Approximate Meat Weight (g)</th>
<th>Approximate Meat Weight (g) midden only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oyster</td>
<td>10</td>
<td>8.3</td>
<td>69.6</td>
<td>8.4</td>
<td>13.9</td>
<td>5.8</td>
</tr>
<tr>
<td>Hard-Shell Clam</td>
<td>36</td>
<td>29.8</td>
<td>512.7</td>
<td>62.2</td>
<td>121.2</td>
<td>96.2</td>
</tr>
<tr>
<td>Soft-Shell Clam</td>
<td>65</td>
<td>53.7</td>
<td>198.9</td>
<td>24.1</td>
<td>70.5</td>
<td>56</td>
</tr>
<tr>
<td>Mussel</td>
<td>2</td>
<td>1.7</td>
<td>5.3</td>
<td>.6</td>
<td>2.6</td>
<td>2.3</td>
</tr>
<tr>
<td>Scallop</td>
<td>3</td>
<td>2.5</td>
<td>1.8</td>
<td>.2</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Atlantic Surf Clam</td>
<td>0</td>
<td>0.0</td>
<td>2.1</td>
<td>.3</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Unidentified</td>
<td>5</td>
<td>4.1</td>
<td>33.4</td>
<td>4.1</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>121</td>
<td>100</td>
<td>823.8</td>
<td>100</td>
<td>208.3</td>
<td>160.4</td>
</tr>
</tbody>
</table>

Note: On all tables count refers to intact shells and diagnostic hinge pieces, while weight includes all identified shell fragments. Meat weight estimates are based on Salwen (1970).

4). Only 120 g of shell found on the site were outside the midden. Soft-shell clams dominated the assemblage, composing 96.9 percent of the total shell hinges and 84.2 percent of the total shell weight, with mussel, quahog, and oyster composing the remainder of the assemblage. Using Salwen (1970) to calculate edible meat weight, the shell recovered from this midden corresponded to over 8,724 g of edible food, although this excludes the unidentified shells from the calculation, which would increase this weight.

Site 102–126

The midden context at Site 102–126 provides a wealth of information (Table 5). A total of 14,441.6 g of shells including 1,332 shells with intact hinges were recovered from the midden. Unlike the other two middens already discussed, a small but notable portion of the shells were burnt. Although less than 10 percent of the shells had visual evidence of burning, the midden itself contained substantial deposits of ash and charcoal. Oyster dominated the assemblage at 51.2 percent of the shells by weight, followed by soft-shell clam at 25.1 percent of the shell weight, with smaller amounts of mussel and hard shell clam and token quantities of whelk, surf clam, and scallop.

Shellfish in Social, Political, and Economic Contexts

Shellfish and Subsistence

The Pequot and related communities in southern New England were seasonally mobile with strong coastal ties and reliance on shellfish for thousands of years before European arrival (McBride 1994). While residing at coastal sites, communities relied heavily on shellfish to the exclusion of other food sources; in fact, at one such fifteenth-century site on Long Island, Mya arenaria represents over 99 percent of the faunal remains (Cerrato et al. 1993). Thin-sectioning of shells from three sites near Long Island Sound show nearly year-round collection, with a preponderance of shellfish collected during late fall and early winter (Bernstein 2002; Lightfoot and Cerrato 1988).

Because no sites predating the mid–eighteenth century have yet been located on the Eastern Pequot reservation, we look to the neighboring

Table 4. Shell Data from the Midden at Site 102–123.

<table>
<thead>
<tr>
<th>Species</th>
<th>Count</th>
<th>Percent by Count</th>
<th>Percent Weight (g)</th>
<th>Approximate Meat by Weight</th>
<th>Meat Weight (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oyster</td>
<td>23</td>
<td>0.3</td>
<td>351.5</td>
<td>1.3</td>
<td>70</td>
</tr>
<tr>
<td>Hard-Shell Clam</td>
<td>65</td>
<td>.9</td>
<td>1,263.5</td>
<td>4.7</td>
<td>299</td>
</tr>
<tr>
<td>Soft-Shell Clam</td>
<td>6,774</td>
<td>96.9</td>
<td>22,735.3</td>
<td>84.2</td>
<td>8,062</td>
</tr>
<tr>
<td>Mussel</td>
<td>120</td>
<td>1.7</td>
<td>585.7</td>
<td>2.2</td>
<td>293</td>
</tr>
<tr>
<td>Unidentified</td>
<td>6</td>
<td>.1</td>
<td>2,074.8</td>
<td>7.7</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>6,988</td>
<td>100</td>
<td>27,010.8</td>
<td>100</td>
<td>8,724</td>
</tr>
</tbody>
</table>
Mashantucket Pequot reservation for information on long-term shell-use patterns. Most Woodland Period and older sites on the Mashantucket Pequot reservation contained few shellfish remains (Vasta 2007:77–78) since many sites in southern New England were at specialized, seasonal locations (Bernstein 1990, 1993; Luedtke 2000; McBride 1994). In contrast to this, several Mashantucket sites from the early reservation period through the late eighteenth century contain large quantities of shellfish (Vasta 2007), a case epitomized by the seventeenth-century Monhantic Fort.

The Monhantic Fort on the Mashantucket Pequot reservation was occupied for likely less than five years during and possibly shortly after King Philips War in 1675 (McBride 2006:323). Archaeologists at the Mashantucket Pequot Museum and Research Center conducted intensive excavation at the site, and faunal material from several features including two midden areas, a storage pit, and the palisade area, was analyzed by Vasta (2007). A total of 11 bones from pigs, cows, and unidentified ungulates contributed only 6.8 percent of the bone mass recovered from the site, while wild mammals provide 41.2 percent, wild birds 0.9 percent, fish 10.2 percent, and amphibians and reptiles 1.7 percent, with the remainder unidentified (Vasta 2007:155–162). However, vertebrate bones contributed only 4.2 percent of the total faunal mass whereas shells provided the rest (Vasta 2007:155–160). In contrast, late eighteenth-century sites on the both the Eastern and Mashantucket Pequot reservations contain few wild mammal remains, leaving shellfish as the largest nondomesticated food source (Cipolla 2005; Fedore 2008; Vasta 2007).

On first glance, this appears indicative of a near complete shift in subsistence patterns from hunted and trapped wild animals to purchased and raised domestic mammals. However, the contribution of fish, shellfish, birds, and reptiles reveals a much more complex picture of food procurement and consumption (Williams 2014). Shellfish from Site 102–123 and Site 102–126 on the Eastern Pequot reservation contributed to faunal material in significant quantities while fish continued to contribute a small but notable percentage (1–5 percent) of animal bones at most eighteenth-century reservation sites (Cipolla 2005; Fedore 2008). From this it is clear that nondomesticated aquatic resources remained important to the Eastern Pequot throughout the eighteenth century, even as hunted terrestrial animals become rare.

Of particular note is the high level of shellfish consumption at several sites during the late eighteenth century, which coincided with periods of external and internal change and conflicts including both the French and Indian War and the American Revolution. During these conflicts, significant numbers of Native American men served in colonial militias (Den Ouden 2005:70–71; Mandell 2007; Silliman and Witt 2010). The subsequent effect on reservation dynamics likely played a role in subsistence needs and may have contributed to the short-term, intensive harvesting of shellfish seen in certain reservation deposits. In contrast to the Late Woodland year-round, winter dominated harvesting pattern (Bernstein 2002; Lightfoot and Cerrato 1988), Site 102–126 showed a strong pattern of summer harvesting for soft-shell clams (see Hunter 2012 for a discussion of shell thin-sectioning and seasonality analysis). This parallels the pattern in which Native American men tended to work off the reservation in spring through fall for local merchants.
and in local militias, while falling off merchant and militia rolls in the winter (Silliman and Witt 2010). Therefore, the prevalence of summer shellfish harvesting coincided with these periods of increased male absences, perhaps tying shellfish gathering to gender dynamics and practices on the reservation.

Shellfish Gathering, Reservation Demographics, and Gendered Practices

Over the course of the eighteenth and nineteenth centuries, large numbers of Eastern Pequots, as well as individuals from all nearby Native communities, were employed off reservations (Den Ouden 2005:70–71,83; Mancini 2009; Mandell 2007:27,43). At only 225 rocky and often swampy acres that were subject to frequent encroachment by Anglo settlers, the Eastern Pequot reservation provided only marginal farmland. To meet changing economic needs, many individuals took employment as whalers, sailors, soldiers, domestic servants, and general laborers in surrounding communities (Den Ouden 2005; Mancini 2009; Mandell 2007). A smaller number worked as craftspeople or healers, often traveling to surrounding areas to sell their products and services (Bragdon 1996:110). As late as the nineteenth century, Pequot peoples and the nearly year-round habitation of some coastal sites further emphasize the importance of shellfish use in this area (Bernstein 1990, 1993, 2002; Lightfoot and Cerrato 1988; Luedtke 2000) and accentuate their key social and subsistence roles (Dincauze 1996; Kerber 1985, 1996; Speck and Dexter 1948). Indeed, shellfish were a routine and culturally relevant component of the Pequot diet prior to colonization.

The few historic accounts that talk about gender seem to provide solid evidence for associating shellfishing tasks with women, at least in the seventeenth century at the establishment of colonial presence (Bragdon 1996:110–111). For instance, Roger Williams (1634) recorded that southern New England Native men focused their subsistence attention on hunting and fishing while women tended to agricultural fields and dug clams and other shellfish. William Wood (1634) also noted that women harvested or at least carried clams from the banks back to Native homes. As late as the nineteenth century, Pequot women such as Patience Toby were described as one of several seasonal residents on the Mashantucket reservation who took trips to Noank for shellfish (Mancini 2009:147–148). These ties between women (and likely children) and shellfish provide a supporting link to the idea that women may have served as cultural brokers and holders of tradition (Den Ouden 2005:76–78; Mandell 2007:61). We offer this as an argument of preponderance: we do not assume that only women procured these food items but, rather, that they may have been primary procurers and that these material remains can help illuminate some of their experiences. As Bragdon (1996:110) noted frequently identify shellfish gathering as primarily the work of women, young children, and the elderly or infirm (Moss 1993), at times suggesting to archaeologists that shellfish served as a marginal, “starvation” food (Osborn 1977). Uniform applicability of these assumptions is questionable on both archaeological and cultural grounds (Claassen 1998; Erlandson 1988); indeed, while shellfish are sometimes discounted as a poor source of calories, Erlandson (1988) demonstrates that they offer a quality source of protein, which when combined with plants could have provided a valuable dietary contribution. Furthermore, the long-term coastal ties of southern New England peoples and the nearly year-round habitation of some coastal sites further emphasize the importance of shellfish use in this area (Bernstein 1990, 1993, 2002; Lightfoot and Cerrato 1988; Luedtke 2000) and accentuate their key social and subsistence roles (Dincauze 1996; Kerber 1985, 1996; Speck and Dexter 1948). Indeed, shellfish were a routine and culturally relevant component of the Pequot diet prior to colonization.
for southern New England, “women’s contributions to diet by way of their shellfish-collecting have received less attention from archaeologists and ethnographers than is merited.”

Although discontinued use of traditional materials does not indicate cultural loss, as argued by Silliman (2009), continued use of prereservation-period materials and resources was rare by the late eighteenth century, leaving open questions as to why certain materials and practices continued unchanged while others were adapted, discarded, or adopted. Subsistence needs certainly played a role in determining diets, but reasons for gathering shellfish went beyond that. The lack of good farmland, challenges of adapting to raising domesticated animals, minimal capital possessed by many reservation individuals, restrictions on hunting, and absence of many of the most experienced hunters presented certain challenges that subsistence decisions had to work around. As women, children, and the elderly were the dominant demographic on the reservation, it is unsurprising to find food resources typically available to and gathered by these individuals. These resources grounded individuals in acts of residence, rather than necessarily requiring them to always act in resistance (Silliman 2014).

Given the strong social roles held by women, making trips to the coast undoubtedly served as a way for these women, as well as the general community, to preserve coastal ties and familiar food practices. As an activity easily accessible to the young, shellfish-gathering traditions also may have suffered fewer interruptions. Children likely traveled with their mothers to the coast from an early age, even before they reached an age where they may have been employed as household servants. This may have allowed coastal ties and shellfish gathering to continue even as families shared less and less time residing together because of work, and children who resided some time away from the reservation likely learned coastal traditions early enough that they could then pick them back up when they returned to the reservation. Households varied in what they procured, though. Site 102–123 residents, by a proxy of shell weight, preferred soft-shell clams (84.2 percent), consumed some hard-shell clam (4.7 percent), but hardly ate oyster (1.3 percent) and mussel (2.2 percent). Yet residents at Site 102–126, occupied at about the same time and only a few hundred meters away, preferred oyster (60.6 percent) over all other mollusks, but also used soft-shell clams at moderate levels (27.1 percent), mussels at a higher level than their 102–123 neighbors (7.3 percent), and hard-shell clam at very low levels (2.9 percent).

For these reasons, shellfish gathering and consumption may have entailed acts of persistence in spite of disruptions to community stability, resulting from ongoing colonialism and economic pressures. Implications of the gendered population dynamics, traditionally gendered food procurement activities, and ongoing consumption practices are particularly important when one considers shellfish in light of the general lack of hunted fauna in reservation assemblages during the eighteenth and nineteenth centuries. Although economic need might have forced women or others to the coast as the only viable way to provide for their families, we propose that women turned to shellfish gathering as part of broader negotiations of their identities and to connect with and pass on personal, family, and community histories of shellfish gathering.

Shellfish, Land Access, Off-Reservation Communities, and Travel

Because shellfish were necessarily gathered off the Eastern Pequot reservation, their presence in reservation assemblages provides insight into mobility and local networks. The land granted to the Eastern Pequot community in 1683 lies approximately 8 km from the nearest coast with a suitable habitat for the mollusk species found on the reservation. During the initial reservation period, the neighboring community at Mashantucket retained a title to a coastal property at Noank (Holmes 2007), whose resources were likely also available to the Eastern Pequot community. However, the shellfish deposits on the Eastern Pequot reservation, which primarily dated to the late eighteenth century, indicate coastal access and shellfish gathering for over 50 years after the title to Noank was forfeited in 1714. As such, it is necessary to explore the means by which individuals maintained or reestablished the coastal ties necessary to acquire marine resources.

Despite losing their reservation at Noank in 1714, some Mashantucket Pequots continued to
call this their home, as the Mohegan minister Samson Occom recorded while staying there in 1754 (Mancini 2009:147–148). As late as the 1830s, Patience Toby was part of a larger group from the Mashantucket Pequot reservation who made a journey to Noank to spend the summer using the estuarine resources in the area (Mancini 2009:147–149). Throughout the eighteenth and nineteenth centuries, as individuals sought work outside reservation boundaries and intermarriage increased, small communities of Native individuals and mixed-ethnic families formed outside reservation boundaries (Mancini 2009; Mandell 2007:45). One such community formed near Pohaganut Bay in Groton approximately 13–16 km from the Eastern Pequot reservation during the 1760s and continued at least through the end of the century (Mancini 2009:117–118). Similar communities existed nearby at Candlewood Hill in Groton and Old Mystic in Stonington from the end of the eighteenth century throughout much of the nineteenth century (Mancini 2009:118–120,126–127). These communities were located with easy access to coastal resources, and they or other similar locations may have served as a place for obtaining shellfish to feed reservation-based families.

The household sites under investigation were clearly home to members of the Eastern Pequot community for at least parts of the year; however, some members of the household may have spent considerable time elsewhere. Whether this time away from the reservation consisted of long blocks of time for employment or occasional trips to other locations, it frequently served as a way to forge and maintain social ties through continued and emerging networks of people and places. For example, information on the routes traveled by Ann Wampy, a Pequot basketmaker, indicates that her travels took her through many off-reservation communities of color where she visited friends and relatives while selling her wares (Mancini 2009:142–144). Likewise, routes taken on trips to the coast for subsistence needs may have doubled as social visits. In addition, potential connections into the Mohegan community on the Thames River, a location from which oysters are plentiful and show up in seventeenth- and eighteenth-century Mohegan sites (Williams 1972), may have provided yet another conduit.

These off-reservation communities of color and trips by reservation residents show that attempts to confine Native populations and restrict movements were not wholly successful. Throughout the early eighteenth century, Connecticut towns placed restrictions on where Native individuals could hunt, requiring “friendly” Indians to make themselves known to local towns, and enacting strict penalties against “skulking Indians” (Den Ouden 2005:78–80). As coastal towns grew in size and became covered by European property laws, Native people faced the threat of trespassing when attempting to access traditional coastal and hunting grounds (Den Ouden 2005:24). Despite this, Native communities clearly continued to reside in many coastal and inland areas outside of reservations, and those living on the reservation periodically made their way across the broader landscape, as Bragdon (2009:129) notes for the Eastern Pequot’s mobility on and off their reservation.

However, despite the fact that shellfishing remained prevalent and individuals peddled wares and visited friends, hunting appears to have decreased dramatically sometime between King Philip’s War (A.D. 1675–76) and the late eighteenth century. Both hunting and shellfishing required access to nonreservation land, but inherent differences in the activities may have resulted in differential reactions by European settlers. The demographic differences discussed above for these activities likely resulted in differential visibility, with settlers more concerned about potential interference and conflict from armed Native men, thereby rendering relatively invisible the activities of Native women and children. Yet, we know that Native American women moved around southern New England as part of the craft economy, frequently making and selling baskets (McMullen 1991).

This combination of shellfish-gathering forays and off-reservation employment helped shape larger community and regional networks that were observed in eighteenth- and nineteenth-century political and social gatherings between Mashantucket and Eastern Pequot, Mohegan, and Niantic communities in southern New England (Bragdon 2009:199–216; Den Ouden 2005:22–23,120–121). As a result, we propose that shellfish gathering, like making and selling baskets,
may have constituted a major reason for women to travel to nearby areas. This connection, in turn, would have involved them in local networks that paralleled those networks in which Native men engaged through their work on farms, battlefields, and ships. In other words, shellfish served as one anchor for intersecting and persisting Native American communities apart from, although navigating through, Anglo-American colonial and settler society around them. To date, it has been unrecognized as such, largely because the archaeological evidence had not yet been considered.

**Conclusion**

As evidenced by substantial shell deposits at several reservation households, Eastern Pequot community members continued to make use of coastal resources throughout the eighteenth century. This time period saw a marked shift toward consumption of domesticated animals over wild animals; however, the continued consumption of shellfish reveals that the transition in mammal resources did not constitute a simple loss of tradition or a complete reliance on the market. Rather, individuals maintained certain practices, adapted old ones, and adopted new ones to serve the needs of their communities within certain boundaries forced by colonialism. This pattern of diminishing hunting and intensive shellfishing in the eighteenth century can be seen in the Eastern Pequot data presented here, as well as that reported for the neighboring Mashantucket Pequot.

The importance of coastal connections, the effort required to access and bring back these resources, and the history of such food use in Native American societies in the region makes these shellfish deposits significant. The Eastern Pequot, as with other Native communities in southern New England, have a long history of coastal ties and procurement of these coastal resources. Shellfish provided substantial quantities of food for these communities at varying points of the year and were not restricted to periods when other food sources were most limited. European colonial practices and the establishment of Indian reservations placed restrictions on Native mobility and land access; however, these restrictions were not absolute.

The shellfish gathered by residents of certain eighteenth-century sites contributed substantially to subsistence needs, but their value did not end at the calories and protein provided, even when no longer used to produce iconic shell beads. Shellfish, as material and practice, participated in likely gendered attempts to feed families and maintain culture and signaled continued connections of a coastal people to the ocean. They also represented household traditions of shellfish gathering as sites of diversity and negotiation. The archaeological evidence from these three eighteenth-century sites demonstrates with certainty that the Eastern Pequot, as a community, sought shellfish for consumption on a regular basis and that women likely made the most significant contribution to that realm. However, individual households consumed different species of shellfish and processed them in different manners, indicating different experiences, preferences, and opportunities among reservation households. Both late-eighteenth-century sites had residents who expended effort to acquire shellfish and bring them home for consumption and who lived in framed wooden houses with rock chimneys and cellars, but these residents compiled their menus differently. One site’s residents preferred soft-shell clams and hardly ate oyster and mussel, yet residents at the other house, occupied at about the same time and only a few hundred meters away, preferred oyster over all others while still using moderate amounts of soft-shell clams and, to a lesser extent, mussels. The difference may reflect variable points of water access, unique coharvesting techniques while other resources were being acquired, or preference by taste, but either way, it manifests household difference within a single community.

In addition to household variation, we can also see interesting changes over time as Eastern Pequot women and men negotiated economy and culture on the reservation through the late eighteenth and into the nineteenth century. The earliest site thus far excavated on the reservation, as described herein, revealed that residents of the likely wigwam structure used shellfish, but they did not consume them in great quantities and did not deposit them in concentrated middens. In contrast, the two houses occupied a few decades later, and
in one case, less than 100 m away, had residents consuming larger quantities of shellfish and depositing them in dense midden deposits. We believe this reveals a kind of discontinuous continuity: the evidence suggests continuity of shellfish use from ancient times, but the archaeological record demonstrates that the late eighteenth century—a growing temporal distance from prereservation days—shows an uptick in shellfish consumption.

The pattern accentuates what Silliman (2009) has argued about the problems of thinking in terms of just change or continuity; we must acknowledge that indigenous people, like others, activated different aspects of their pasts depending on their present and hopes for the future. In this case, Eastern Pequots, likely women, looked to a tradition of shellfish use, perhaps even in decline in the middle of the eighteenth century, to sustain their families and their cultural trajectories in a tumultuous time on the reservation. Of interest, they turned to this subsistence option even when their houses had become less “traditional” in other ways. Mid-eighteenth-century residents at the one site lived in a wigwam-type of structure but consumed less shellfish than those who would live nearby just a couple of decades later in larger houses with wooden plank walls, window glass, iron nails, and cellars. We are reminded that in our search for change and continuity, we have to assess genealogies of practices (e.g., Stahl 2012) and material culture with as many branches as possible. More important, we are reminded that the process is not really an either–or option about change and continuity, but about persistence (Panich 2013; Silliman 2012). Persistence means individuals can and do look back at their own history in different ways and at different times, mobilizing it to serve their own present.

Members of the Eastern Pequot community went to great lengths in the second half of the eighteenth century to persist materially, economically, socially, and generationally. The recovery and analysis of normally mundane broken bits of shell reveal new chapters in the story of those struggles and triumphs, reminding us that New England Native women in the eighteenth century anchored their reservation communities to the land, to the past, and to the future. This they enacted, minimally but not exclusively, in the making of meals or the traveling to resource areas, continuing the trajectories set by their ancestors a century or more before when women stood up for their communities in the face of land and leadership disputes (e.g., Den Ouden 2005; Richmond and Den Ouden 2003). The Eastern Pequot Tribal Nation community continues today precisely because of these kinds of individual, household, and community decisions and negotiations. In fact, this community continues to reach back to those material pasts today, remarking on shell as it is excavated from the ground, asserting themselves as originally coastal people, and wearing wampum jewelry that has become a hallmark of adornment in Native New England.

Acknowledgments. We would like to thank the Eastern Pequot Tribal Nation, especially Tribal Council, for their support of this research project and their long-term sponsorship of the Eastern Pequot Archaeological Field School under the second author’s direction. Kathy Sebastian Dring provided helpful comments on this manuscript as part of Tribal Council’s review of this work and reminded us of how important shellfish are to today’s Eastern Pequot tribal members. We thank Kurt Jordan for his comments on a draft of this article, and we extend gratitude to Ken Sassaman for his editorial guidance and to the anonymous reviewers for their helpful comments and suggestions. We appreciate the hard work of several field seasons of undergraduate and graduate students who conducted the excavations that acquired these shellfish remains, and a special thank you is extended to Robert (Bobby) Sebastian, Natasha (Nikki) Gambrill, Ralph Sebastian, Shianne Sebastian, and Ashbow (Bo) Sebastian for their assistance with the 2006, 2007, and 2011 field seasons that produced some of the core data contained in this article. The research material contained herein is based on work supported by the National Science Foundation under Grant No. 0623532 and the Wenner-Gren Foundation for Anthropological Research under Grant No. 8256, both awarded to the second author. José Martínez-Reyes kindly translated the abstract into Spanish.

References Cited

Bernstein, David J.
Bradley, James W.
Brayton, Kathleen
Campisi, Jack
Cave, Alfred A.
Cerrato, Robert M., Kent G. Lightfoot, and Heather V. E. Wallace
Cipolla, Craig N.
Cipolla, Craig N., Stephen W. Stillman, and David B. Landon
Claassen, Cheryl
Dawdy, Shannon L.
Den Ouden, Amy E.
Dincauze, Dena F.
Erlandson, Jon M.
Fedore, Michael
Ferris, Neal
Frink, Liam
Gifford-Gonzalez, Diane, and Jun U. Sunseri
Greaves, Anthony P., Julienne Bernard, and Anna Noah
Green, Lance, and Mark R. Plane (editors)
Harper, Ross K., Mary G. Harper, and Bruce Coulette
Hauptman, Laurence M.
Hauptman, Laurence M., and James D. Wherry (editors)
Hayden, Anna K.
Hollis, Timothy
Holmes, Sarah L.
Hunter, Ryan
Jordan, Kurt A.

Kerber, Jordan E.

Lapham, Heather A.

Liebmann, Matthew

Lightfoot, Kent G.


Lightfoot, Kent G., and Robert M. Cerrato

Lightfoot, Kent G., Antoinette Martinez, and Ann M. Schiff

Loren, Diana DiPaolo

Luedtke, Barbara E.

Mancini, Jason R.

Mandell, Daniel R.

McBride, Kevin A.


McMullen, Ann

Moss, Madonna L.

Nassaney, Michael S.

Oland, Maxine, Siobhan Hart, and Liam Frink (editors)

Osborn, Alan J.

Panich, Lee

Pauvao-Zuckerman, Barnet

Pauvao-Zuckerman, Barnet, and Vincent M. LaMotta

Pauvao-Zuckerman, Barnet, and Elizabeth J. Reitz

Richmond, Trudie Lamb, and Amy E. Den Ouden


