# Domestic Architecture at Letchworth (8JE337) and Other Woodland Period Ceremonial Centers in the Gulf Coastal Plain

Martin Menz

Architectural remains, especially domestic architecture, are essential for understanding the ways in which households organized themselves socially and economically in the past. Unfortunately, these remains are infrequently identified from Woodland period (1000 BC–AD 1000) archaeological sites along the Gulf Coast, an area home to well-known ceramic and mortuary traditions during this time. As a result, our knowledge of Woodland period households in the region is scant. In this article I present a newly discovered house from Letchworth (8JE337), a large Woodland period ceremonial center in northwest Florida, and compare it to the few published examples of houses from this region. I show that domestic architecture along the Gulf Coast during the Woodland period is diverse, suggesting differences in the organization of households and the historical development of ceremonial centers.

**Keywords**: Houses, household archaeology, domestic architecture, settlement patterns, spatial organization, villages, aggregation, Woodland period, Southeastern United States

Los restos arquitectónicos, especialmente la arquitectura doméstica, son fundamentales para comprender de qué manera se organizaban los hogares socialmente y económicamente en el pasado. Desafortunadamente, los restos arquitectónicos del período Woodland (1000 aC–1000 dC) se identifican a muy poca frecuencia en la costa norte del Golfo de México, la cual es una
zona muy conocida arqueológicamente por sus tradiciones alfareras y funerarias. Como resultado de la falta de restos arquitectónicos del periodo Woodland, el conocimiento de los hogares en esta región es escaso. Aquí presento los resultados de las excavaciones de una casa recién descubierta en el sitio arqueológico Letchworth (8JE337), el cual es un gran centro ceremonial del
período Woodland en el noroeste de Florida. También comparó la casa de Letchworth con los pocos ejemplos publicados de
casas de esta región. Estos datos demuestran que la arquitectura doméstica del período Woodland en la costa del Golfo es
diversa, lo que sugiere diferencias entre la organización de los hogares y el desarrollo histórico de los centros ceremoniales.

Palabres claves: Casas, arqueología doméstica, arquitectura doméstica, patrones de asentamiento, organización espacial, aldeas, agregación, periodo Woodland, sureste de Estados Unidos

he household is the primary unit of economic production and social reproduction in most non-industrialized societies (Wilk and Rathje 1982). Although not necessarily coterminous with the household, domestic architecture—most notably, the house—is perhaps the most useful form of archaeological data for assessing interaction between households and

larger scales of social organization (Moore 2012; Pluckhahn 2010a). Architectural data, including the size, construction, and interior layout of houses, help archaeologists interpret the activities of households in the past and how they varied across space and through time (Steere 2017).

Unfortunately, archaeological evidence for pre-Mississippian domestic architecture is lacking

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along the Gulf Coastal Plain, particularly in northern Florida and adjacent parts of Georgia and Alabama: this area was the heartland of the Swift Creek and Weeden Island ceramic exchange networks and mortuary traditions during the Woodland period. A few notable examples of houses dating to the Early (1000-1 BC), Middle (AD 1-500), and Late Woodland (AD 500-1000) periods have been found (Milanich 1973, 1974; Pluckhahn 2003, 2011; Shelby et al. 2014), but these are few and far between. Twenty years ago, the state of research on Woodland period domestic architecture in this area was summed up by archaeologists who observed that "little evidence for domestic architecture has been found" (Anderson 1998:283), "no discernable architectural patterns have been noted" (Stephenson et al. 2002:346), and "architectural data for the Woodland period in the region is sketchy at best" (Pluckhahn 2003:156). Despite advances over the past two decades in our understanding of Woodland period settlement along the Gulf Coast (e.g., McFadden and Wallis 2018; Pluckhahn and Thompson 2018; Russo et al. 2014), evidence for domestic structures remains as "sketchy" as ever.

The lack of data on domestic architecture is a problem for an area thought to have undergone a widespread shift toward sedentary village life during this time (Anderson and Sassaman 2012; Pluckhahn 2010b). Woodland period ceremonial centers and other smaller sites have been referred to as villages since at least the 1940s (e.g., Willey 1949). Recent research demonstrates that several of these sites were home to relatively permanent residential populations (Pluckhahn 2003; Pluckhahn and Thompson 2018), particularly in coastal environments with intensifiable wild food resources given that pre-maize agriculture was largely absent in the Deep South (Gremillion 2002). However, evidence of growing labor investment and formalization in domestic architecture, hallmarks of increasingly sedentary or "domesticated" early village societies, remains scarce (Cobb and Nassaney 2002; Wilson 1988).

The few examples of Middle and early Late Woodland architecture from northwest Florida and surrounding areas have rarely been synthesized or compared to identify similarities and differences in their construction and layout (but see Pluckhahn 2011). In this article, I present the first evidence of domestic architecture from Letchworth (8JE337), a large Woodland period ceremonial center in northwest Florida, and compare it with structures from other nearby ceremonial centers. The architectural data and associated artifact assemblages considered here indicate that household size, activity patterns, control over resources, and mobility varied during this time and that much of this variation occurred between, rather than within, ceremonial centers. I suggest that this variation between households at different ceremonial centers reflects differences in the historical development of those centers, particularly local responses to the process of village aggregation.

# Archaeological Research at Letchworth

The Letchworth site is a Woodland period ceremonial center in Jefferson County, Florida, just south of Lake Miccosukee. Letchworth was located at the heart of regional interaction networks during the Woodland period, situated between the well-known centers of Kolomoki, McKeithen, Garden Patch, and Crystal River (Figure 1). Letchworth-Love Mounds Archaeological State Park contains at least seven extant mounds, including the 15 m high earthen platform Mound 1, plaza, and an extensive a artifact scatter roughly a half-kilometer in diameter (Figure 2). In a 1997 letter, Calvin Jones noted that he had located 28 mounds at the site, about a dozen of which were in the privately owned lands to the south and east of the park. 1 Most of the smaller mounds follow the lake drain, a stream that flows southwest from Lake Miccosukee and runs along the boundary between the park and the adjoining property.

Analysis of diagnostic ceramics collected by a previous landowner (Newman 1997) and from systematic auger testing (Tesar et al. 2003) showed that Letchworth was occupied throughout the Woodland period, containing Deptford, Swift Creek, and Weeden Island I components. Research carried out by the Florida Bureau of Archaeological Research over the last two decades has contributed significantly to our understanding of Letchworth's

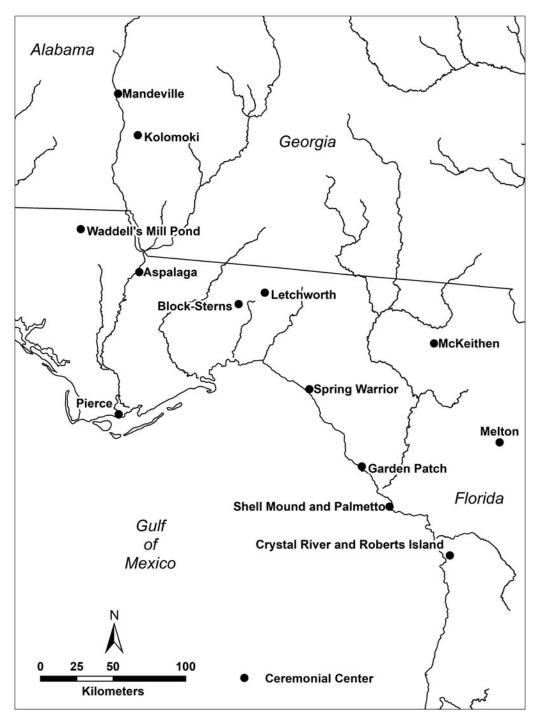


Figure 1. Locations of Woodland period ceremonial centers along the Gulf Coast.

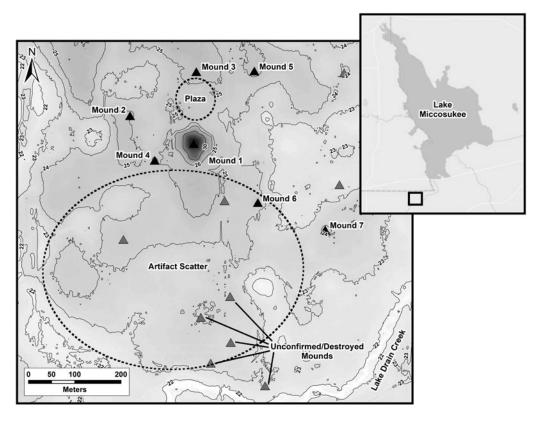


Figure 2. Map of Letchworth including positions of extant (black) and unconfirmed/destroyed mounds (gray) and the site's location relative to Lake Miccosukee.

size and the age and construction of its mounds; it has shown, for instance, that Mound 1 was built in three stages beginning sometime after the late third or early fourth century AD (Harper 2017; Seinfeld and Bigman 2013). Unfortunately, much of these data have been restricted to site reports and have not been synthesized or widely disseminated. This, along with a lack of chronological data with good provenience, has resulted in Letchworth's exclusion from regional syntheses (e.g., Anderson and Sassaman 2012; Milanich 1994; but see Kassabaum 2019).

#### Domestic Architecture at Letchworth

Fieldwork at Letchworth in 2019–2020 was organized around two main goals: locate and excavate features related to Woodland period habitation and assess the chronology of the site through radiocarbon dating of its domestic

contexts. As part of this project, a gradiometer survey covered approximately 22,500 m<sup>2</sup> across four zones identified as potential habitation areas based on previous surveys (Harper 2017; Tesar et al. 2003). Ground-truthing excavation of a large anomaly in Zone 4, in the eastern portion of the site south of Mound 7 (Figure 3), uncovered a stratified hearth feature with two pits nearby. Features were located below the plow zone and showed no obvious signs of disturbance. The excavation unit intersecting these features, named EU1, contained Swift Creek and Deptford pottery types, but no Weeden Island artifacts.

A 4×4 m block excavation, Block 1, was placed around EU1 to expose the full extent of the hearth and identify more associated features. As with EU1, the artifact assemblage from Block 1 primarily consisted of Middle Woodland period Swift Creek and Deptford diagnostics. A small amount of burned clay, possibly daub,

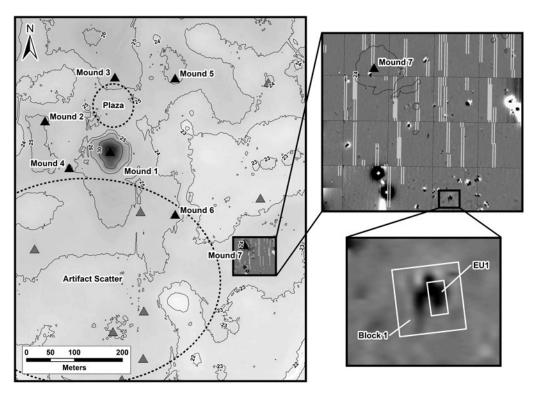


Figure 3. Location of gradiometer survey Zone 4 at Letchworth with placement of excavation units.

was found as well. Subsistence remains were sparse across all contexts at Letchworth, presumably because of poor preservation; those present in Block 1 consisted of small pieces of calcined bone and charred hickory nutshell. Block 1 also contained small amounts of artifacts usually associated with ceremonial activities, including several pieces of quartz and a few tiny flecks of mica; however, most of the assemblage seems to have been the product of domestic activities.

### **Block 1 Structure**

Excavation in Block 1 exposed the hearth and nearby pits encountered in EU1, several more pit features, and an arc of faint, small-diameter postholes (Figure 4). The pits were distributed throughout the block about a meter from the hearth. The postholes making up the arc were spaced about 20 cm apart. This arcing pattern of postholes formed the wall of a round structure roughly 4.3 m in diameter if the distance between the hearth and wall were maintained across the

entire structure. Unfortunately, a large disturbance, possibly from a tree throw or erosion, destroyed most of the structure's southwestern quadrant. An AMS radiocarbon date from this disturbance indicates it is modern.

Most posthole features were around 10 cm in diameter, indicating the structure was constructed using narrow flexed poles (Lacquement 2004). Posthole depth was difficult to determine because the occupation layer associated with the structure was heavily mottled, but most postholes were at least 10 cm deep in profile. Some posthole features overlapped, suggesting possible maintenance or rebuilding. Three radiocarbon dates from posthole features cluster together between cal AD 420–637.<sup>2</sup>

Six pit features were identified, bisected, and excavated. Most pits measured around 30–40 cm in diameter and about 50–60 cm deep. Feature 5 was somewhat narrower than the others at around 20 cm in diameter. The function of these pits is unclear, but they were probably used for storage: their locations away from the walls suggest they were not used as smudge

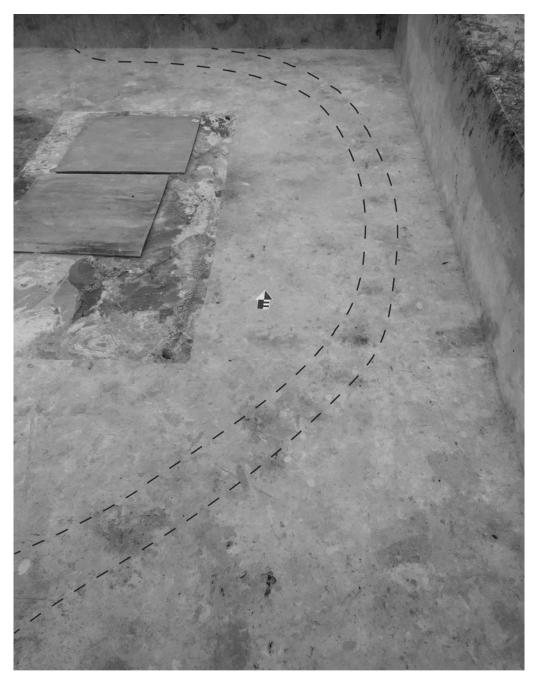


Figure 4. Floor of eastern half of Block 1 with arc of postholes present.

pits for perimeter benches or beds. The volume of the six pits totaled 172.5 L. Radiocarbon dates from three of the pit features (Features 31, 58, and 60) overlap around cal AD 414–548. Feature 6 produced a later date of cal AD 564–650, but its early distribution overlaps

with other dates from the structure; this feature is most likely coeval with the rest.

The hearth at the center of the structure consisted of two burned layers separated by a layer of lighter-colored sand, indicating the feature was filled and then reused (Figure 5). The

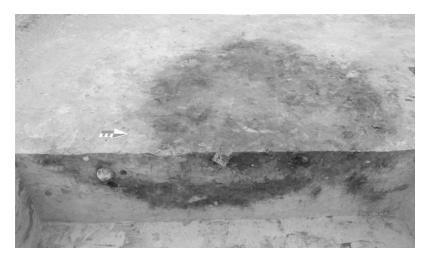


Figure 5. Stratified hearth (Features 1 and 4) in Block 1 at Letchworth.

lower layer of the hearth, Feature 4, was nearly 150 cm in diameter. The layer of lighter sand placed on top covered all of Feature 4 in plan. The upper layer of the hearth, Feature 1, was slightly smaller with a diameter of around 130 cm and was offset about 20–30 cm north of Feature 4. Feature 1 contained numerous stones concentrated along its bottom and northern slope, indicating this feature may have been lined with rocks. Both layers of the hearth returned nearly identical radiocarbon dates of cal AD 425–575.

To summarize, the Block 1 structure was a flexed pole building with an interior area of roughly 14.5 m<sup>2</sup> (Figure 6). This structure was likely a house occupied sometime around AD 450–550. The stratified hearth and evidence of possible wall maintenance or rebuilding indicate the structure was either used for multiple seasons or was reused in two separate occupations. The overlapping radiocarbon dates from features make it difficult to distinguish between these two possibilities; if the structure was rebuilt during a second occupation, it occurred very soon after the first one.

# Woodland Period Domestic Architecture on the Gulf Coast

The comparative sample consists of six Woodland period structures from four ceremonial centers dating to the Deptford, Swift Creek, and

Weeden Island I phases, all of which are from "village" or "village midden" contexts and are therefore probably domestic in nature. I excluded structures from overtly ceremonial contexts such as the Mound B structure at McKeithen, which is nearly twice as large as the largest buildings considered here (Milanich et al. 1997:107), because they probably represent their own category distinct from residences located in midden areas. Still, several buildings I discuss share formal similarities with sweat lodges and other forms of nondomestic architecture and may have served multiple functions, a situation that was likely the norm at ceremonial centers where the boundary between the mundane and ceremonial blurred.

The sample includes three structures documented during salvage excavations at Block-Sterns (Jones and Tesar 1996:214–229), one from McKeithen (Milanich et al. 1997:56-58), and one from Kolomoki (Pluckhahn 2003:148-165), as well as the Block 1 structure from Letchworth. There are currently no radiocarbon dates for the three structures at Block-Sterns, but the structures at Letchworth, McKeithen, and Kolomoki have dates obtained from associated features (Table 1). Other ceremonial centers such as Crystal River (Pluckhahn and Thompson 2018:105–106) and Garden Patch (McFadden and Wallis 2018; Wallis and McFadden 2016) have produced evidence of domestic structures, but limited horizontal exposure and overlapping

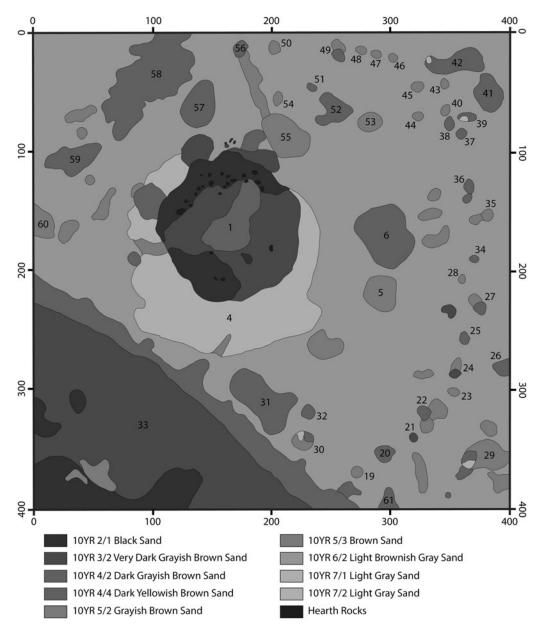


Figure 6. Block 1 plan view at 60 cm below datum with features labeled.

features make comparison of data from these sites difficult.

# Block-Sterns (8LE148)

Structures 1 and 2 from Block-Sterns were both large, elongated ovals measuring  $4.2 \times 10.0$  m and  $4.4 \times 9.3$  m, respectively (Jones and Tesar 1996:220). The portion of the salvage excavation encompassing these structures included large pit

features interpreted as refuse or cooking pits filled with faunal debris, possibly from feasting, and a wide array of artifacts used in everyday life, such as chipped stone tools, debitage, and utilitarian ceramics. Ceremonial activities and possible craft production are indicated by pigment stone and a fragment of worked copper recovered nearby. The walls of Structures 1 and 2 were constructed using large diameter (>15 cm) rigid

Site	Sample #	Type	Feature #	Feature Type	Material	<sup>14</sup> C Age	±	Calibrated Results $(2\sigma)^a$	$\delta^{13}$ C (‰)	Reference
Letchworth	Beta-559307	AMS	33	Disturbance?	UID wood charcoal	90	30	AD 1687–1731 (26.0%); AD 1806–1926 (69.5%)	-26.4	Menz 2021:Table 11
Letchworth	Beta-559295	AMS	6	Pit	Carya sp. nutshell	1170	30	AD 772–901 (73.9%); AD 916–974 (21.6%)	-23.7	Menz 2021:Table 11
Letchworth	Beta-564490	AMS	33	Disturbance?	Carya sp. nutshell	1210	30	AD 702–741 (9.7%); AD 771–892 (85.7%)	-25.9	Menz 2021:Table 11
Letchworth	Beta-564482	AMS	6	Pit	Carya sp. nutshell	1460	30	AD 564-650 (95.4%)	-23.7	Menz 2021:Table 11
Letchworth	Beta-559303	AMS	20	Post	UID wood charcoal	1520	30	AD 436–465 (6.5%); AD 475–501 (7.3%); AD 508–517 (1.1%); AD 530–608 (78.5%); AD 624–637 (2.0%)	-26.3	Menz 2021:Table 11
Letchworth	Beta-559305	AMS	37	Post	UID wood charcoal	1530	30	AD 624-037 (2.0%) AD 434-467 (11.3%); AD 472-519 (15.6%); AD 527-603 (68.6%)	-26.7	Menz 2021:Table 11
Letchworth	Beta-559306	AMS	4	Hearth	Arundinaria sp.?	1560	30	AD 426-575 (95.4%)	-28.2	Menz 2021:Table 11
Letchworth	Beta-559302	AMS	1	Hearth	Carya sp. nutshell	1570	30	AD 425-565 (95.4%)	-26.9	Menz 2021:Table 11
Letchworth	Beta-559304	AMS	22	Post	UID wood charcoal	1580	30	AD 420-556 (95.4%)	-28.6	Menz 2021:Table 11
Letchworth	Beta-559308	AMS	58	Pit	Carya sp. nutshell	1590	30	AD 419-548 (95.4%)	-24.9	Menz 2021:Table 11
Letchworth	Beta-564491	AMS	60	Pit	Carya sp. nutshell	1610	30	AD 413-542 (95.4%)	-26.9	Menz 2021:Table 11
Letchworth	Beta-564492	AMS	31	Pit	UID wood charcoal	1620	30	AD 406-543 (95.4%)	-27.8	Menz 2021:Table 11
Letchworth	Beta-559310	AMS	31	Pit	UID wood charcoal	2180	30	364–150 BC (94.4%); 131–121 BC (1.0%)	-25.1	Menz 2021:Table 11
Letchworth	Beta-559309	AMS	60	Pit	UID wood charcoal	3260	30	1613–1492 BC (81.6%); 1483–1450 BC (13.8%)	-25.6	Menz 2021:Table 11
McKeithen	UM-1092	radiometric	9	UID	n/a	1300	70	AD 571–899 (92.5%); AD 919–958 (2.9%)	n/a	Kohler 1978:Table 4
McKeithen	UM-1091	radiometric	9	UID	n/a	1310	95	AD 607–624 (1.5%); AD 637–888 (93.9%)	n/a	Kohler 1978:Table 4
McKeithen	UM-1257	radiometric	9D	UID	n/a	1805	100	37–13 BC (1.1%); AD 4-435 (93.3%); AD 465–474 (0.4%); AD 503–507 (0.1%); AD 517–530 (0.5%)	n/a	Kohler 1978:Table 4

Fable 1. Continued

Site	Sample #	Type	Feature #	Sample # Type Feature # Feature Type	Material	<sup>14</sup> C Age	+1	$^{14}C$ Age $\pm$ Calibrated Results $(2\sigma)^a$ $\delta^{13}C$ (%o)	δ <sup>13</sup> C (%o)	Reference
Kolomoki	Beta-165118 AMS	AMS	131A	Hearth	UID bone	1160	40	40 AD 773–987 (95.4%)	-20.7	Pluckhahn 2003: Table 2.3
Kolomoki	Beta-161791 radiometric	radiometric	131B	Hearth	UID wood charcoal	1280	70	AD 641-895 (94.1%);	-25.0	Pluckhahn 2003: Table 2.3
								AD 927-947 (1.4%)		
Kolomoki	Beta-234443	AMS	57B	House Pit	Zea mays kernel	1420	40	AD 572-665 (95.4%)	-27.4	Pluckhahn 2011: Table 7-1
Kolomoki	Beta-206785	radiometric	57A	House Pit	Carya sp. nutshell	1480	40	AD 482–492 (1.0%);	-26.1	Pluckhahn et al. 2006:Table 1
								AD 536-654 (94.5%)		
Kolomoki	Kolomoki Beta-206786 radiometric	radiometric	57B	House Pit	Carya sp. nutshell	1550	40	40 AD 426–596 (95.4%)	-25.3	-25.3 Pluckhahn et al. 2006:Table 1

Calibrated using OxCal 4.4 (Bronk Ramsey 2009) with the IntCal20 curve (Reimer et al. 2020).

posts. The floors of these structures were made up of compacted midden (Jones and Tesar 1996:220) or clay (Jones et al. 1998:238). No daub was recovered in association with either structure, and neither structure contained a hearth. A large pit feature excavated near the center of Structure 2 was interpreted as likely in use at the same time as the building (Jones and Tesar 1996:182). Unfortunately, the volume of this pit cannot be estimated because the area was exposed with a mechanical excavator, truncating most features.

A much smaller structure was identified just southwest of Structure 2 in association with another large pit feature, Feature 57. Like the other structures at Block-Sterns, Feature 57 was built using large-diameter rigid posts without daub or a prepared floor. This oval structure measured roughly  $2.9 \times 3.9 \,\mathrm{m}$  (Jones and Tesar 1996:225). Its internal area is difficult to estimate given the substantial gaps in the wall, but most of the floor area was taken up by Feature 57. This structure was initially interpreted as a cooking rack or roofed hut over Feature 57, rather than a house; however, the large pit feature may have been excavated and filled after the structure was built. A hearth filled with food debris was interpreted as feasting refuse in association with the termination of the Block A house at Kolomoki (Pluckhahn et al. 2006), and Feature 57 may be the result of a similar practice. Based on this possibility and the close similarity to Structures 1 and 2 in terms of construction, I included the Feature 57 structure in this sample.

# McKeithen (8CO17)

This structure, found in the northern midden area at McKeithen, has not been definitively interpreted as a house due to its poor preservation and its location along a relatively steep slope overlooking nearby Orange Creek; however, Milanich and colleagues (1997:58) note its similarity in shape and construction to other structures interpreted as houses. The dimensions of this oval structure were roughly  $3 \times 5$  m. The western half of the structure wall has been estimated in Figure 7 based on the association of wall post features with artifacts documented for the structure's eastern half (56–57). It is difficult to determine whether the structure was built

using flexed poles or rigid posts because both smaller (≤10 cm) and larger (>15 cm) postholes are present, but the presence of larger postholes suggests the use of rigid poles. No daub was noted in association with this structure. Much of the interior was not excavated due to a large tree, and so the presence of a hearth cannot be determined. A large, linear feature was encountered along the eastern wall around the same depth as the bottom of the postholes, suggesting that the structure floor may have been excavated into the slope to form a more even surface. The large feature was filled with calcined bone and other artifacts and resembled features identified as smudge pits placed underneath benches at a nearby Contact period house (Milanich 1972:44). Two radiocarbon samples from this feature produced dates between cal AD 571-958.

# Kolomoki (9ER1)

The Block A structure at Kolomoki was a semisubterranean building with its floor excavated about 30-50 cm below the modern plow zone into the sandy clay subsoil. Another large basin probably representing an additional semisubterranean structure was encountered near the edge of the site's plaza (Pluckhahn 2003:171). The Block A structure is rectangular and measures about  $2.5 \times 3$  m, excluding its entrance ramp (Pluckhahn 2011:187). Posthole diameters along the northern edge of the structure's basin were large (>15 cm), indicating that the superstructure was built using rigid posts (Pluckhahn 2003:155). Six grams of daub were recovered during excavation of Block A, possibly from the clay-lined hearth (Pluckhahn 2003:162). Midden filling the subterranean basin in Block A included 307 g of mica, presumably from the production of ceremonial items (Pluckhahn 2003:162; see also Wright and Loveland 2015). The interior of the structure included a hearth measuring about 75 cm in diameter but no pits. The hearth was stratified into two zones, with the lower zone containing the remains of a young deer and other evidence of small-scale feasting (Pluckhahn et al. 2006). As noted earlier, this feast probably signaled the termination of occupation at the Block A structure because the remains were left in place and the basin was subsequently filled with midden. A dense collection of features just to the south of this structure included six pits totaling 72.7 L. Radiocarbon dates from the Block A structure range from cal AD 426–927 (Pluckhahn 2003:155).

# Comparisons

Comparison of the six structures just discussed reveals several patterns (Figure 7; Table 2). Structure size is divided into three modes with substantial gaps between them, possibly due to the small sample size. Structures 1 and 2 from Block-Sterns are the largest, whereas the Letchworth Block 1 and McKeithen northern midden structures are intermediate in size. The smallest structures, the Feature 57 structure at Block-Sterns and the Block A structure at Kolomoki, are 9 m<sup>2</sup> or smaller. These size categories could represent different functions, but the artifact assemblages associated with each structure were overwhelmingly composed of utilitarian domestic items, making this interpretation unlikely.

Differences in structure size may instead reflect differences in the number of inhabitants. Absolute headcounts calculated based on floor area are not reliable, particularly as a stand-alone measure of the size of a domestic unit (Steere 2017:86), but they can be useful for comparing structures. Using Cook's (1972:16) "rule of thumb formula," the intermediate and large structures were probably sufficient to house nuclear or extended families, respectively. Alternatively, Structures 1 and 2 at Block-Sterns may have housed larger and wealthier polygynous families, evidence for growing inequality during this period (White 2013). By this same estimate, the two smaller structures only had room for two or three occupants each. Even with the wide variation, these structures are similar to Middle Woodland houses in the Midwest in both size and occupation capacity (Smith 1992:214).

When compared by time period, the Middle Woodland Deptford-Swift Creek structures from Block-Sterns and Letchworth have an average area of 24.6 m<sup>2</sup> compared with 11.3 m<sup>2</sup> for the Late Woodland Swift Creek-Weeden Island I structures from McKeithen and Kolomoki. Smaller houses with sizes comparable to the Feature 57 structure at Block-Sterns and the Block A

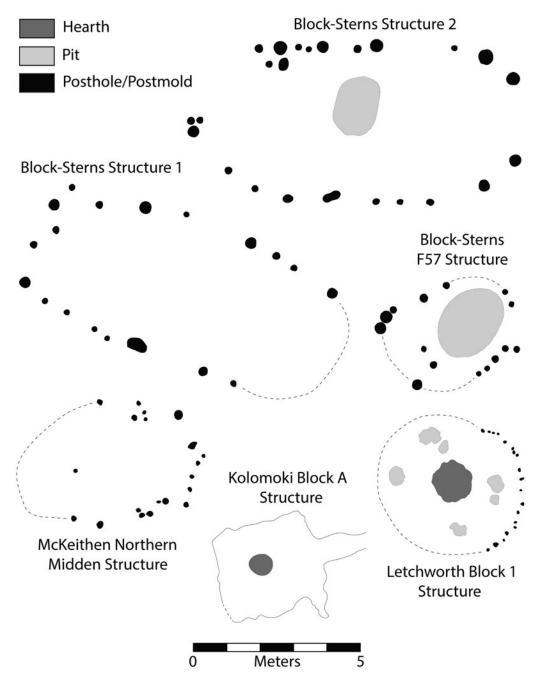


Figure 7. Comparison of structure plans from Woodland period ceremonial centers.

structure at Kolomoki have been found in the Midwest at Late Woodland sites such as the Range site (e.g., Kelly 1990). The reduction in house size and their orientation around shared courtyards in the Late Woodland Midwest

correspond with dramatic changes in community, labor, and subsistence organization (Kelly 1990; Steere 2017:23–24, 33). The small size of the Block A structure suggests that, like at Range, households at Kolomoki may have been

Table 2. Architectural Attributes from Structures at Woodland Period Ceremonial Centers.

Site Number	Site Name	Name/Context	Dates	Phase	Area (m <sup>2</sup> )	Shape	Floor	Posts	Daub	Hearth	Pit Features	Pit Volume (L)
8LE148	Block-Sterns	Structure 1	n/a	Deptford-Swift Creek	36.0	Oval/Sub-Rectangular	Undet.	Rigid	No	No	Undet.	n/a
8LE148	Block-Sterns	Structure 2	n/a	Deptford-Swift Creek	39.0	Oval	Unprepared	Rigid	No	No	Interior	Undet.
8LE148	Block-Sterns	F57 Structure	n/a	Deptford-Swift Creek	9.0	Oval	Unprepared	Rigid	No	No	Interior	Undet.
8JE337	Letchworth	Block 1	AD 450-550	Deptford-Swift Creek	14.5	Circle	Unprepared	Flexed	Some	Yes	Interior	172.5
8CO17	McKeithen	Northern Midden	AD 600–850	Swift Creek-Weeden Island I	14.3	Oval	Undet.	Undet.	No	Undet.	Undet.	n/a
9ER1	Kolomoki	Block A	AD 550–750	Swift Creek-Weeden Island I	8.2	Rectangular/Keyhole	House Pit	Rigid	Some	Yes	Exterior	72.7

*Note:* Undet. = Undetermined.

organized into clusters with shared storage facilities representing corporate groups.

Structures 1 and 2 at Block-Sterns are closely spaced, have few or no interior storage features, and are surrounded by large pits that may have been used for storage before they were filled with refuse, suggesting a substantial amount of cooperation and interdependence between neighboring households. This pattern of large, closely spaced structures lacking interior storage is characteristic of the Middle Woodland period north of the Gulf Coastal Plain in the Piedmont and Appalachian Mountains (Steere 2017:90–91). The lack of interior storage in the Block A structure at Kolomoki may also represent the organization of labor and storage at a level beyond the individual household (Pluckhahn 2011: 188–189). In contrast, the house at Letchworth contains several interior storage features and does not seem to have other buildings nearby based on remote-sensing data. The Letchworth structure is also the only one constructed using flexed poles, reflecting lower labor investment associated with shorter-term occupation and greater mobility. This interpretation is supported by the low artifact densities at Letchworth, including Block 1, when compared to domestic contexts at other Woodland period ceremonial centers (Menz 2021:84–85). These attributes indicate that the occupants of the Block 1 structure at Letchworth were probably more reliant on organization of production and consumption at the level of the individual household and may not have been integrated into a larger village community in the same way as other households discussed here.

# Conclusion

Domestic architecture at Middle and Late Woodland period ceremonial centers along the Gulf Coast exhibits a great deal of diversity with respect to size, construction, and interior features. These architectural differences represent differences in the organization of households and their labor and resources. Despite these differences, the residents of Block-Sterns, McKeithen, and Kolomoki shared similar settlement patterns and forms of community, with relatively sedentary villages oriented in arcs

around monumental plazas and mounds; this pattern was observed throughout the Gulf Coastal Plain, both on the coast and farther inland. This similarity in settlement may correspond with the use of rigid, single-set post construction for their houses, which would have been sturdy and lasted several seasons.

In contrast, domestic architecture at Letchworth reflects a more temporary, possibly seasonal occupation. This interpretation seems at odds with the massive amount of labor required to construct the 15 m tall Mound 1 and as many as 27 other mounds across the site, a scale of monumentality dwarfing every other contemporaneous ceremonial center in the area other than Kolomoki. Where did all these people live? Other large mound sites built by huntergatherers have evidence for intensive occupation (e.g., Gibson 2006). Based on the data presented here and the large number of Woodland period sites scattered around the perimeter of nearby Lake Miccosukee (Tesar 1980), the most likely scenario is that the bulk of the population who constructed the mounds at Letchworth lived in settlements around the lake and surrounding landscape; visitors from farther afield attending ceremonies at the site may have also contributed to mound construction.

Woodland period village aggregation along the Gulf Coast often occurred at places where ceremonies and exchange helped integrate disparate groups (Pluckhahn 2010b; Wallis 2018). The changing organization of subsistence and other forms of labor that aggregation demanded probably also facilitated monument construction, further intensifying investment in a single place (Cobb and Nassaney 2002). Sites like Kolomoki and Crystal River began as vacant ceremonial centers, but later phases of their occupations included villages housing dozens, if not hundreds, of people (Pluckhahn et al. 2018; Pluckhahn and Thompson 2018; West et al. 2018). Village aggregation at other sites such as Garden Patch occurred in tandem with their emergence as ceremonial centers (Wallis et al. 2015).

Letchworth did not undergo a phase of village aggregation, and its population instead maintained a dispersed, low-density settlement pattern centered on Lake Miccosukee throughout its history. One possibility is that the ecological productivity and ease of access to the ceremonial center at Letchworth provided by Lake Miccosukee facilitated community integration without requiring the frequent interaction with non-kin and attendant social conflict characteristic of villages and other nucleated settlements (Bandy and Fox 2010:12; Johnson 1982). Despite differences in history, climate, and ecology, the developmental trajectory of Letchworth may parallel other, largely vacant ceremonial centers elsewhere in the Eastern Woodlands (e.g., Lynott 2015; Mainfort 2013).

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Data Availability Statement. Analyzed materials, analytical tables, and reports from Letchworth mentioned in this article are housed at the Bureau of Archaeological Research, Tallahassee, Florida.

# Notes

- 1. B. C. Jones to W. Morgan, letter, March 13, 1997, Florida Division of Historical Resources, Tallahassee.
- 2. Radiocarbon date ranges mentioned in the text are the earliest and latest extent of the  $2\sigma$  calibrated ranges for the relevant samples.

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