

27 PHASE I RECONNAISSANCE (2014 – 2015) AT ALABAMA: A SUMMARY OF SCRAP INVESTIGATIONS IN EAST – CENTRAL BELIZE

Meaghan M. Peuramaki-Brown, Shawn G. Morton, Tawny L.B. Tibbits, and Lisa Green

From 2014 to 2015, a Phase I Reconnaissance program was conducted at the site of Alabama by the Stann Creek Regional Archaeology Project (SCRAP). Alabama is a major ceremonial centre located in the southern portion of the Stann Creek District, nestled up against the eastern slopes of the Maya Mountains, approximately 20 km inland from the Placencia Lagoon. The site was first located by the Stann Creek Project in the 1970s and later investigated by the Point Placencia Archaeological Project in the 1980s, which determined the epicentre to have been constructed and occupied during the late facet of the Late Classic to Terminal Classic periods (ca. 700-900 AD). SCRAP members returned to the site in order to investigate settlement development at Alabama and its relationship to local resource extraction and trade within and beyond the East-Central Belize region. Our Phase I Reconnaissance had three goals: 1) to assess the Alabama epicenter, 2) to initiate a systematic settlement survey and surface collection, and 3) to initiate studies of resource development and use by the ancient Maya of the area. This paper summarizes the research goals and results of the 2014-2015 investigations.

Introduction

In July 2015, the Stann Creek Regional Archaeology Project (SCRAP) completed its Phase I Reconnaissance at the site of Alabama in the southern portion of the Stann Creek District. This first phase would serve as the foundation for what is hoped to be a long-term archaeology program in the area, with future expansion into neighbouring parts of the region. This paper introduces the reader to the setting, outlines the goals of SCRAP research, and summarizes the Phase I Reconnaissance.

Setting Region

East-Central Belize (Figure 1) is a dramatic geographic region, roughly delineated to the north by the north-western extension of the Maya Mountains and the beginning of relatively flat landscapes with bigger and longer rivers; to the west by the highest peaks of the Maya Mountains; to the east by the Caribbean Sea; and to the south by the north end of the Bladen Formation (south of the Swasey Branch of the Monkey River). This is roughly the area of modern-day Stann Creek District. Within a span of about 20 km, one can move from the coast and lagoons in the east, through the flat coastal pine savannah (pine ridge), into the broadleaf forests of the fertile alluvial valleys, and up into the foothills of the Maya Mountains and beyond.

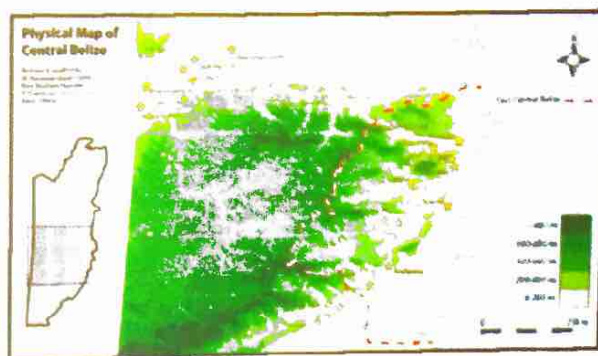


Figure 1. Elevation map of East-Central Belize showing inland sites.

Many of the larger, more nucleated settlements and likely civic-ceremonial centres of the region are located in upper alluvial valleys and pockets, and the eastern foothills of the Maya Mountains. These major and minor centres share a number of common material culture patterns, which may serve to identify the uniqueness of the region in a manner similar to neighbouring Southern Belize:

- Low, large, non-vaulted architecture, which includes masonry substructures and perishable superstructures.
- Non-limestone architectural facing blocks and 'megalithic' features (Figure 2).
- Alluvial clays and sands used for construction core fills.
- Large borrow pits surrounding monumental architecture, formed by excavation for fill and serving as

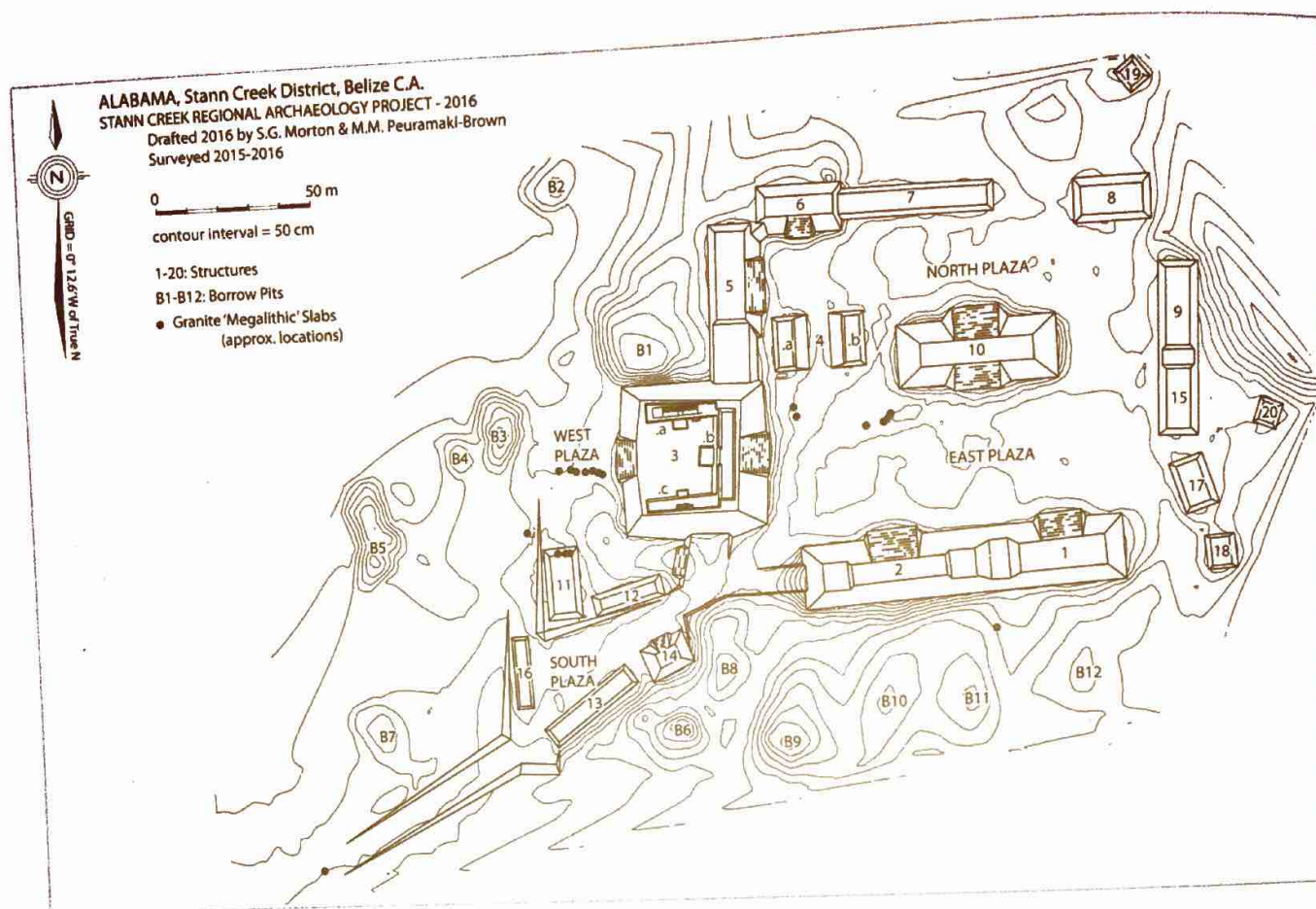


Figure 4. Topographic and rectilinear map of Alabama epicentre.

the aforementioned rural complexity and “boomtown”: settlement areas that flower rapidly in response to resource development, economic fluctuations, and/or political tendencies, including the outcomes of centralizing, decentralizing, colonizing, and/or defense strategies (Barth 1975; Peuramaki-Brown 2016). Such settlement realities typically emerge in severely disadvantaged or isolated frontier zones, often on the boundary between shifting geo-political entities. This framework is shaping our avenues of investigation and is couched within the four aforementioned diachronic elements.

Phase I Reconnaissance

The SCRAP 2014-2015 Phase I Reconnaissance consisted of three primary research components at Alabama: epicentre, settlement, and resource development. Each were directed toward understanding the rapid emerging “urban-ness” of the area, despite its seemingly rural nature, originally noted in the 1980s when test excavations by the Point

Placencia Archaeology Project (PPAP) revealed the single-phase construction of the epicenter architecture in the late facet of the Late Classic period (ca. AD 700).

Our aim is to continue outlining a comprehensive biography for Alabama, and to begin conducting diachronic analyses of material assemblages through a lens of social, economic, and political independence and dependence, and comparison with long-term research trends from adjacent regions. The goals for the Phase I Reconnaissance were as follows:

1. To clear, assess, and topographically map the monumental architecture of the epicenter, as well as the looting activity first documented in the 1980s.
2. To complete a comprehensive, systematic GPS survey of the Alabama settlement in order to map mounds, scatters, resource zones; to surface collect materials from these features to begin building a settlement chronology and to gain a preliminary understanding

of resident populations and associated activities.

3. To begin characterizing and sourcing various resources, including granite materials, artifacts, and architecture; daub and pottery wares; and obsidian artifacts.

Epicentre Program

Morton (2015) topographically remapped the Alabama epicenter (finalized in 2016 and created using a Nikon DTM-322+ total station, with point coverage following a roughly 2m x 2m grid), both correcting and adding to previous PPAP maps (see Peuramaki-Brown and Schwake 2014 for summary) that were missing architecture and exaggerated the scale of many structures and features (Figure 4). While adequate for a general understanding of the site and for planning and presentation purposes, the inaccuracies present in the previous PPAP maps and absence of digital topographic data made its use in our current investigations limited. This work is helping us to better understand the layout and configurations of monumental construction and infrastructure at the site, and is building toward our ongoing assessment of Maya urban 'hallmarks' represented at Alabama (Houk 2015:27-39).

The topographic mapping captured significant disturbance in the North and East Plazas caused by banana plantation activity (previously noted in Walters 1988), which will help when selecting (or avoiding) excavation locations for the epicenter in Phase II Testing. Re-mapping has also afforded us a better understanding of previous descriptions of the site; for example, in PPAP reports the presence of architecture over 10m tall at Alabama is suggested, which we have determined is true only if measurements were taken from the bottom of surrounding borrow pits as opposed to plaza level, and may have been a way to conveniently fit Alabama into Hammond's typology (which it does not).

Epicentre survey activities have also yielded several observations that will help to further direct investigations, particularly with reference to the construction history. Not least among these is the location of the epicentre itself within the broad valley, atop the west bank and

above the main branch of the Waha Leaf Creek. This valley-bottom site stands in sharp contrast to neighbouring Southern Belize sites such as Lubaantun and Nim Li Punit, where restricted hilltops served to limit lateral core expansion, and presumably encouraged the development of a relatively dense monumental fabric that conformed to a significant degree with natural topography. In contrast, the Alabama epicentre, in its dense jungle shroud amongst sprawling orange groves, is remarkable for its regularity of plan, massive if not unusually tall structures, and spacious plazas. However, if examined more closely, a number of inconsistencies in this regularity are quickly noticed; for instance, the North and South Plazas are unusually long and narrow. Looking at the site plan, a potential explanation for this arrangement is suggested. While the truth of the matter must wait for excavation, it is difficult not to make comparisons between the central placement of Alabama Str. 10, effectively bisecting an otherwise conventional plaza space, and that of Str. A1 at Xunantunich. As at Xunantunich, it seems reasonable to suggest that this structure was added during a later phase of monumental construction within the Alabama site core.

A second, and glaringly visible inconsistency is associated with the causeway extending off the southwest corner of the site core. Walking in this direction, through the South Plaza and into the orange groves, one is struck by the sharp break in the style, orientation, and scale of the surrounding architecture. From the strict orthogonal layout of the North and East Plazas, one is suddenly walking past low platforms that flank the causeway and define the South Plaza, oriented more-or-less to the causeway and flanking terraces. Again, it seems reasonable to suggest that these structures, along with the associated causeway that threads awkwardly between borrow pits on the west and south periphery of the epicentre, are the product of construction efforts following the initial establishment of the monumental core. Test excavations in both areas in the 1980s were unable to chronologically distinguish the two areas due to limited carbon and artifact materials within fills. The similarly non-orthogonally arranged Str. 17 through 20 off the east flank of the epicentre are

perhaps likewise suggestive of multiple phases of epicentral construction. A secondary question emerges from these observations: if Str. 13, 14, and 16 through 20 represent later additions to the monumental site core, and if Str. 10, likewise, represents a later phase of construction, then is the orientation, scale, and placement of Str. 10 – notably in harmony with Str. 1 through 9 and 15 – anachronistic, or does it represent specific planning concerns or historical developments? These are questions that will be considered in future investigations.

Our ongoing studies are using the epicentre mapping data to conduct volumetric and spatial movement analyses. The seemingly rapid development of the epicentre also makes it an ideal candidate for space syntax and urban planning studies to contrast against site epicentres that developed over a thousand years or more (see examples in Morton et al. 2014).

Settlement Program

A full GPS survey was conducted over 2.47km² around the Alabama epicenter. Survey method involved the systematic walking of orchard rows in all property blocks to locate mounds and artifact scatters at surface. Opportunistic coverage occurred in the heavily bushed areas and the *milpas* of the surrounding foothills, as invited to visit by various community members. Adopting a ‘traditional’ approach to survey (vs. aerial drone) allowed us to experience the landscape firsthand, as well as engage with community members as we encountered them during our walks, which was also helpful in better knowing the Alabama area and its modern-day residents. It also allowed us to assess on-ground conditions at individual settlement sites, particularly those lower than 50 cm in height, and to identify artifact scatters. In total, 158 mounds (128 groups), 42 artifact scatters (pre-Columbian and historic), and numerous granite and clay source zones were identified (Figure 5).

Some preliminary observations can be made regarding settlement character (to be further examined in upcoming seasons and publications). The percentage of individual mounds (Type I settlement sites, following the typology presented in Ashmore et al. 1994) is considerably higher than all other types (Table

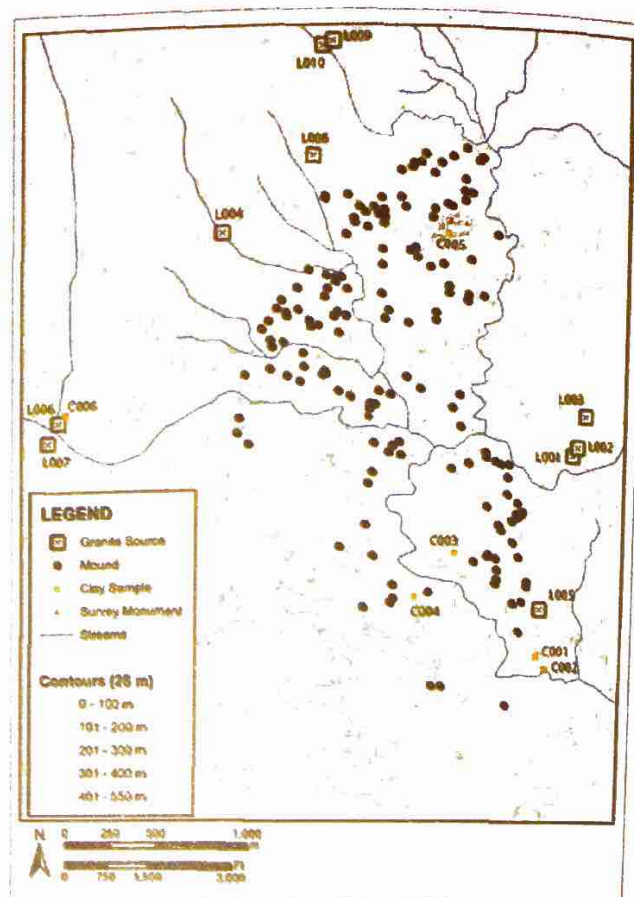


Figure 5. GPS settlement survey of Alabama.

1). This observation confirms PPAP initial impressions that the settlement surrounding the site centre consisted primarily of solitary mounds (only minimal settlement investigations were pursued in the 1980s), as opposed to mounds arranged in formal or informal groupings. Although this is interesting and possibly represents a different form of social organization and/or integration as compared to other areas in the lowlands where much higher percentages of Types II and III often exist, we must also consider that the spacing requirements for the assignment of groups (mounds within 30m of each other, assumed to be part of the same houselot if residential) may not be valid in this area. It may be that a spacing of 40-50m is more typical; however, this is difficult to assess only by using GPS mapping among disturbed sites.

Based on the current distribution of known sites, many Alabama residents were locating their homes nearby water sources (streams), as well as seeking higher ground locations within the valley, particularly along the margins of the upper alluvial terraces. It is

Table 1. Alabama settlement site classifications.

Type	Description	n*	%
I	Isolated mound less than 2m high.		
II	2-4 mounds, informally arranged, all less than 2m high and within 30m of each other.	104	81.25
III	2-4 mounds, orthogonally arranged, all less than 2m high and within 30m of each other.	12	9.38
VI	1 or more mounds, at least 1 being 2-5m high and within 30m of each other.	8	6.25
TOTAL # GROUPS		128	100.00

*these group counts are updated since 2015 based on new mound identifications in 2016

likely that agricultural pursuits were occurring both in the valley bottom as well as in the lower foothills, dependent on crops – the soils of the Waha Leaf Creek valley are fertile and well drained (Graham 1994:17). Additionally, many of the mounds recorded appear to be oriented slightly east of True North, similar to half the orientations observed in the epicentre.

We have also noted (Peuramaki-Brown et al. 2015) that the clustering of mounds at Alabama is not nearly as clear as has been observed of settlement in other areas of the lowlands – the occurrence of spatial clustering in the distribution of houses, with large open areas between clusters, being a feature of the low-density urban patterns expressed in many areas of the Maya lowlands, comparable to neighbourhoods in other areas of the world (Peuramaki-Brown 2014; Smith 2011). Such patterns typically involve the grouping of 12-15 settlement sites/groups (Type C settlement patterns in Willey 1956). The possible clusters at Alabama are relatively small in number of included groups. The smaller clusters and/or lack of clustering are interesting when viewed from a possible “boomtown” perspective, where a lack of neighbouring tendencies (compared to more long-term urban processes) is the norm.

Surface collection in the settlement resulted in over 4000 artifacts recovered, and are being used to begin building preliminary chronologies, and characterizations of resident populations and activities. Materials included pottery (vessel fragments, figurines, whistles, candeleros, handled censers, etc.); daub (with wattle impressions); granite groundstone items;

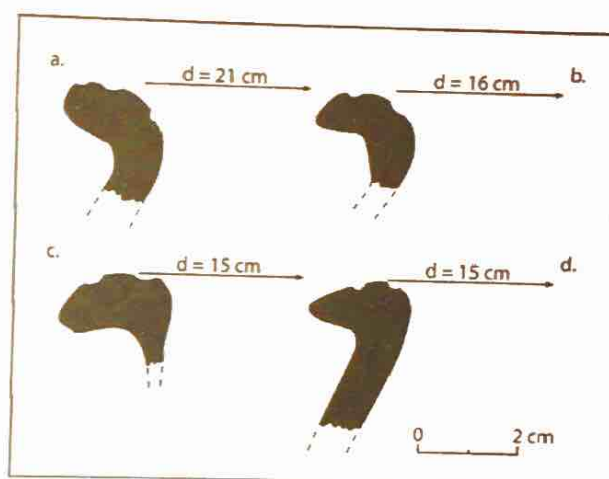


Figure 6. Examples of grooved, everted rim jar fragments (profiles) recovered from surface collection, labelled by catalogue number: a. 10361-T031, b. 10361-ALA 056A, c. 10361-T021, d. 10361-T025 (drawings by M. Peuramaki-Brown).

chipped stone tools and debitage of local quartzite, quartz, phyllite, as well as imported obsidian and chert; various slate artifacts; unidentified greenstone and jadeite pieces; and marine shell. Identifiable surface collected ceramics (although slips are usually absent or extremely poor) have been predominantly assigned to the late facet of the Late Classic to Terminal Classic, including British Honduras ashwares (later forms and Belize Red when slips survive), a single Mt. Maloney LCII bowl sherd, and moulded-carved materials identified as Ahk'utu' and possibly Pabellon (C. Helmke, personal communication, 2015).

Some Early Classic ceramics and Terminal Classic to Early Postclassic lithic candidates were also present. The identified Early Classic materials consisted of additional

Mr. G. Greene for permission to work on his property, Mr. H. Chiac for all his assistance, and residents of Maya Mopan and Independence for welcoming us into their communities. We also greatly appreciate our many colleagues for their various collaborations and conversations regarding our work at Alabama.

References

- Ashmore, Wendy, Samuel V. Connell, Jennifer J. Ehret, C.H. Gifford, T. Neff, and Jon C. VandenBosch
1994 The Xunantunich Settlement Survey. In *Xunantunich Archaeological Project, 1994 Field Report*, edited by R.M. Leventhal and W. Ashmore, pp. 248-289. Report submitted to the Belize Department of Archaeology, Belmopan.
- Barth, Gunther
1975 *Instant Cities: Urbanization and the Rise of San Francisco and Denver*. Oxford University Press, New York.
- Bathelt, Harald, and Johannes Glückler
2003 Toward a Relational Economic Geography. *Journal of Economic Geography* 3:117-144.
- Cornec, Jean
2008 *Geologic Map of Belize*. Compiled by Cornec, J. 1985-2008. Map in possession of authors.
- Dunham, Peter S., Robert C. Murray, William E. Brooks, Robert P. Reynolds, Theresa H. Cookro, and Jeremy F. Jacobs
1995 *Field Report of the 1995 Season of the Maya Mountains Archaeological Project (MMAP)*. Report submitted to the Department of Archaeology, Forest Department, Office of Geology and Petroleum, and the Belize Audubon Society, Belize.
- Golitko, Mark, James Meierhoff, Gary M. Feinman, and Patrick Ryan Williams
2012 Complexities of Collapse: the Evidence of Maya Obsidian as Revealed by Social Network Graphical Analysis. *Antiquity* 86:507-523.
- Graham, Elizabeth
1994 *The Highlands of the Lowlands: Environment and Archaeology in the Stann Creek District, Belize, Central America*. Monographs in World Archaeology, Vol. 19. Prehistory Press and the Royal Ontario Museum, Madison, WI and Toronto, ON.
- Hammond, Norman
1975 *Maya Settlement Hierarchy in Northern Belize*. *Contributions of the University of California Archaeological Research Facility* 27:40-55.
- Houk, Brett A.
2015 *Ancient Maya Cities of the Eastern Lowlands*. University Press of Florida, Gainesville.
- Iannone, Gyles, and Samuel V. Connell (eds.)
2003 *Perspectives on Ancient Maya Rural Complexity*. The Cotsen Institute of Archaeology, University of California, Los Angeles.
- Joyce, T. A.
1931 *Report on the British Museum Expedition to British Honduras, 1931*. Unpublished manuscript. On file, Department of the Ethnography, British Museum, London, England, and The Latin American Library at Tulane University, Rare Collections, RBC 972.82(910)J89 I LAL.
- Leeds, Anthony
1980 *Towns and Villages in Society: Hierarchies of Order and Cause*. In *Cities in a Larger Context*, edited by T. Collins, pp. 6-33. University of Georgia Press, Athens.
- MacKinnon, J. Jefferson
1989 *Spatial and Temporal Patterns of Prehistoric Maya Settlement, Procurement, and Exchange on the Coast and Cays of Southern Belize*. Unpublished PhD dissertation. University of Wisconsin-Madison.
- Morton, Shawn G.
2015 *The 2015 Epicentre Investigations at Alabama*. In *The Stann Creek Regional Archaeology Project: Report of the Second (2015) Field Season*, edited by M. M. Peuramaki-Brown, pp. 19-28. Report presented to the Belize Institute of Archaeology, Belmopan, Belize. Available: <https://scraparchaeology.com/publications/>
- Morton, Shawn G., Meaghan M. Peuramaki-Brown, Peter C. Dawson, and Jeffrey D. Seibert
2014 *Peopling the Past: Interpreting Models for Pedestrian Movement in Ancient Civic-Ceremonial Centres*. In *Mapping Spatial Relations, Their Perceptions and Dynamics*, edited by S. Rau and E. Schöenherr, pp. 25-44. Springer International Publishing, Switzerland.
- Moutsiou, Theodora
2011 *The Obsidian Evidence for Scale of Social Life During the Palaeolithic*. Unpublished Ph.D. dissertation, Royal Holloway, University of London.
- Rockman, Marcy
2003 *Knowledge and Learning in the Archaeology of Colonization*. In *Colonization of Unfamiliar Landscapes: The archaeology of adaptation*, edited by M. Rockman and J. Steele, pp. 3-24. Routledge, London and New York.

Peuramaki-Brown, Meaghan M.

2012 *The Integration and Disintegration of Ancient Maya Urban Centres: Charting Households and Community at Buenavista del Cayo, Belize*. Unpublished PhD dissertation, University of Calgary. Available: <https://athabascau.academia.edu/MeaghanPeuramakiBrown>

2014 Neighbourhoods and Dispersed/Low-density Urbanization at Buenavista del Cayo, Belize. *Research Reports in Belizean Archaeology* 11:67-79.

2016 Settlement and Resource Development at Alabama, Belize: Past, Present, and Future Investigations. *Research Reports in Belizean Archaeology* 13:239-250.

Peuramaki-Brown, Meaghan M. (ed.)

2015 *The Stann Creek Regional Archaeology Project: Report of the Second (2015) Field Season*. Report presented to the Belize Institute of Archaeology, Belmopan, Belize. Available: <https://scraparchaeology.com/publications/>

Peuramaki-Brown, Meaghan M., and Linda Howie

2017 *Pre-Columbian Pottery and Building Materials of the East-Central Belize Maya: A Petrographic Characterization Study*. Paper presented at the 82nd Annual Meeting of the Society for American Archaeology, Vancouver, BC, Canada, 31 March 2017.

Peuramaki-Brown, Meaghan M., and Sonja Schwake (eds.)

2014 *The Stann Creek Regional Archaeology Project (SCRAP): Results of the First (2014) Field Season*. Report submitted to the Institute of Archaeology, National Institute of Culture and History, Belize. Available: <https://scraparchaeology.com/publications/>

Peuramaki-Brown, Meaghan M., Tawny L. B. Tibbits, Lisa Green, Jesucita Guerra, and Brittany Johnson

2015 The 2015 Settlement Investigations at Alabama. In *The Stann Creek Regional Archaeology Project: Report of the Second (2015) Field Season*, edited by M. M. Peuramaki-Brown, pp. 29-86. Report presented to the Belize Institute of Archaeology, Belmopan, Belize. Available: <https://scraparchaeology.com/publications/>

Rabinowitz, Alan

1986 *Jaguar: One Man's Struggle to Save Jaguars in the Wild*. Collins, London.

Scarborough, Vernon L., and Fred Valdez, Jr.

2003 The Engineered Environment and Political Economy of the Three Rivers Region. In *Heterarchy, Political Economy, and the Ancient Maya: The Three Rivers Region of the East-Central Yucatán Peninsula*, edited by V. L. Scarborough, F.

Valdez, Jr., N. Dunning, pp. 3-13. The University of Arizona Press, Tucson.

Shafer, Harry J., and Thomas R. Hester

1983 Ancient Maya Chert Workshops in Northern Belize, Central America. *American Antiquity* 48(3):519-543.

Smith, Michael E.

2011 Classic Maya Settlement Clusters and Urban Neighbourhoods: A Comparative Perspective on Low-Density Urbanism. *Journal de la Société des Americanistes* 97(1):51-73.

Stomper, Jeffrey, Wendy Brown, and Elizabeth Pope

2004 Recent Research at Mayflower, Stann Creek District, Belize. *Research Reports in Belizean Archaeology* 1:323-331.

Tibbits, Tawny L. B., and Meaghan M. Peuramaki-Brown

2015 The 2015 Resource Investigations at Alabama. In *The Stann Creek Regional Archaeology Project: Report of the Second (2015) Field Season*, edited by M. M. Peuramaki-Brown, pp. 87-98. Report presented to the Belize Institute of Archaeology, Belmopan, Belize. Available: <https://scraparchaeology.com/publications/>

Tibbits, L.B. Tawny

2016 *Geochemical Sourcing of Granite Ground Stone Tools from Belize*. Unpublished PhD dissertation, University of Iowa.

Walters, Gary Rex

1988 *Field Report Dec. 1987-Jun. 1988 Point Placencia Archaeological Project*. Unpublished report submitted to the Belize Department of Archaeology, Belmopan, Belize.

Wiley, Gordon R.

1956 Problems Concerning Prehistoric Settlement Patterns in the Maya Lowlands. In *Prehistoric Settlement Patterns in the New World*, edited by G.R. Riley, pp. 107-114. Wenner-Gren Foundation for Anthropological Research, New York.

1972 *The Artifacts of Altar de Sacrificios*. Papers of the Peabody Museum of Archaeology and Ethnology Vol. 64, No. 1. Harvard University, Cambridge.

Williams, A. Megan

2016 *Preliminary Obsidian Source Analysis for the Site of Alabama, Belize*. Unpublished BA thesis, Athabasca University.