27 "SOME LESSONS CAN'T BE TAUGHT, THEY SIMPLY HAVE TO BE LEARNED": EXPERIENCES FROM THREE SEASONS OF INVESTIGATIONS AT ALABAMA, STANN CREEK DISTRICT, BELIZE

Meaghan M. Peuramaki-Brown, Shawn G. Morton, Cristina Oliveira

From 2014 to 2015, the Stann Creek Regional Archaeology Project (SCRAP) completed a preliminary survey of the ancient Maya site of Alabama in the southern reaches of the Stann Creek District, and initiated a program of settlement testing in 2016. Located in the material culture sub-region of East-Central Belize, Alabama appeared relatively rapidly during the late facet of the Late Classic to Terminal Classic periods (ca. 700-900 CE). The two phases of SCRAP research thus far have helped to reinforce lessons learned from previous research in the region, as well as introduce new lessons regarding the nature of ancient Maya material remains in East-Central Belize and how to pursue their archaeological recovery. This paper presents the lessons SCRAP members have learned—ranging from issues dealing with the adoption of old maps and excavation notes, effaced earthen-core architecture, granite as construction materials, poor pottery preservation, etc.—and how they will help to shape and direct future investigations.



This paper is dedicated to the late Mr. Gonzalo Choc (Figure 1), who was a much-loved member of the Stann Creek Regional Archaeology Project from 2014 to 2016.

Introduction

As the title quote by Picoult (2007:74) suggests, this paper examines eight lessons learned by, or reinforced for, members of the Stann Creek Regional Archaeology Project (SCRAP) during the first three years of investigations at the ancient Maya site of Alabama in the southern end of the Stann Creek District of Belize; in particular, we are sharing those lessons we had previously been taught in one form or another but had to experience firsthand in order to truly appreciate. The version of the paper presented at the 2017 BAS was intentionally light-hearted. Our aim, here, is to present these lessons in a somewhat more formal context, as they might prove useful in the work of other archaeologists, students, teachers, tour guides, etc. For many, these lessons are not new, but they are ones that we should be reminded of from time-to-time, as a form of selfreflection as practitioners of Maya archaeology. Each lesson starts with the original quote(s) provided by a project member, and the lesson is discussed as it relates to our ongoing work in the Stann Creek District.

Lesson 1: There are Significant Maya Archaeological Sites in the Stann Creek District

"It's interesting that there are certain areas of the country that are underrepresented and understudied. I never fully realized some of the potential bias in what we learn almost exclusively coming from major centers in the 'heartland', and how important it is to look at smaller settlements and surrounding habitation" (SCRAP Team Member #1, personal communication, 2017).

The presence of ancient Maya archaeological sites and material culture in the Stann Creek District typically comes as a surprise to many people, despite an entire book



Figure 2. Map of East-Central Belize (Stann Creek District) showing location of known major inland and coastal Maya archaeological sites. Compiled by M. Peuramaki-Brown.

written on the subject by Elizabeth Graham (1994; see also Graham 1976, 1978, 1982, 1986, 1987, 1989, 2001), who is considered the progenitor of Stann Creek District archaeology. Public or professional, many would be hard-pressed to name a single pre-Columbian site in the region. Prior to her extensive survey and testing in the 1970s, little archaeological work had been conducted in the district, limited to the inland sites of Pomona (Kidder and Ekholm 1951; MacKie 1985), Kendal (Gann 1918; Price 1899), and Pearce (Joyce 1931), and some of the offshore cays (Mitchell-Hedges 1931).

The known sites of the district can be divided into two broad categories (Figure 2): the inland sites, where the majority of settlement and civic-ceremonial life was focused among the broadleaf forests of the alluvial valleys, and the coastal sites where specialized activities took place, such as limemaking in the Early Classic, saltmaking in the Late Classic, and waystations along the coastal sea trade route during the Postclassic (MacKinnon 1986, 1989a, 1990; MacKinnon and Kepecs 1989; MacKinnon and May 1990; Sills 2016; see also many of the aforementioned publications by Graham). In terms of sites open to the public, there is but one: The Mayflower Sites (Mayflower, Tau Witz) located in the Maintzunun, Mayflower-Bocawina National Park (Stomper et al. 2004). Many of the sites in the northern half of the district, including Pomona and Kendal, have their origins in the Preclassic with occupation extending into the Postclassic (Graham 1985), while sites in the southern half appear limited to occupation spanning from the Late Classic to Early Postclassic, such as Pearce and Alabama (Dunham et al. 1995; MacKinnon et al. 1993).

For three seasons, SCRAP has been working at the small major centre of Alabama, and to-date, occupation of the site appears to have dramatically increased in the late facet of the Late Classic, perhaps even originating at this time, and extended into the early facet of the Early Postclassic (Peuramaki-Brown 2016, 2017; Peuramaki-Brown et al. 2017). From 2014-2015 we concentrated on resurveying the monumental core of the site and producing the first systematic settlement survey in all of the Stann Creek District. In 2016, we then initiated testing of settlement sites within a naturally bounded area of the settlement zone in order to develop a sense of the architecture outside of the monumental core, as well as to begin refining the settlement occupation chronology and characterizing resident households. In 2016, we also extended our research focus to the north at the Pearce Sites in the Cockscomb Basin Forest Reserve (Peuramaki-Brown and Morton 2016).

Lesson 2: Producing Field Reports with Explicit Methods is Essential

"I always knew it was important to file both a preliminary and final report, as well as copies of all field documentation as soon as possible after a research season, but I never truly understood how important these documents could prove to be" (SCRAP Team Member #2, personal communication, 2017).

"We learned not to assume that because we've done archaeology in one region that we know exactly what we're doing in another" (SCRAP Team Member #3, personal communication, 2017).

Prior to our research at Alabama, the Point Placencia Archaeological Project (PPAP) conducted preliminary mapping, extensive testing, as well as consolidation work in the epicentre of the site in the 1980s (MacKinnon 1988a, 1988b, 1989c; MacKinnon and Mav 1991; Walters 1988). When we began our background research on Alabama in 2013, our first goal was to go through reports from the period to determine what exactly had been done at the site, how we could build from the results. and to ensure that we would not be redoing what had already been done. Unfortunately, the few reports on file in the Belize Institute of Archaeology (IA) archives were limited in content with regard to investigation methods and details, and no original field notes were included. Additionally, only a limited number of previous project members were available to discuss their memories of details regarding this research conducted some 30 years ago. The ability to retrace the past work of archaeologists is critical and underlines the requirements that permit holders have in Belize regarding annual documentation and report filing. This is an important fact of which all Belizeans should be made aware: the results of any archaeological research (data) are required to stay in Belize. SCRAP team members spend much time, effort, and money preparing both preliminary and final field reports, and copies of all of our field documentation, along with copies of all presentations and publications, are put on file at the IA each year. Additionally, much of our data is shared in open access format on our project website (<u>www.scraparchaeology.com</u>).

An important part of this reporting work is simply explaining our applied methods and techniques in terms of survey, excavation, and preliminary artifact analysis. The yearly need to explain our methods, no matter how 'standard' they may seem in archaeology, also helps us to continually reflect on our procedures; Are they actually suitable for what we are doing or are we just doing them because 'that is how it has always been done'?

Lesson 3: Map Making is an Interpretive Act

"The degree of interpretation involved in map making seems to be correlated fairly heavily to the familiarity with the subject matter. The difference lies in drawing what you see vs. what you interpret. This reinforces the fact that all map making is subjective" (SCRAP Team Member #4, personal communication, 2017).

Due to changes in standards, technologies, and personnel over time, including the particular experiences of individuals, long-term mapping of archaeological sites can be a complicated affair. This must always be remembered and respected, especially when dealing with older project maps and drawings. In the 1980s, the PPAP mapped the monumental core at Alabama, beginning with a simple tape and compass map before moving to a transit-produced coarse topographic map (1 m resolution) and rectilinear interpretation (Figure 3). When we returned to the site in 2014, these maps were an essential source for aligning the work of the PPAP with By measuring buildings and our own. comparing our results to the maps, which were typically spot on, we were able to plan and



Figure 3. Progression of maps of Alabama, from left to right, of the monumental core: tape-and-compass (PPAP 1986), topographic transit-made (PPAP 1987, 1 m contour), rectilinear interpretation (PPAP 1988), combined topographic total station-made and rectilinear interpretation (SCRAP 2016, 0.5 m contour). All images are on file at the Belize Institute of Archaeology.



Figure 4. Taproot and ant nest damage in ALA-047A mound. Photo © SCRAP 2016.

contextualize our present operations. However, there is no such thing as a definitive site map, and new technologies, opportunities, and hindsight encouraged us to remap the monumental core.

When it comes to archaeological mapping, it is important to start with what is physically visible on the ground—although, this too can be extremely subjective—vs. what is understood or interpreted from the ground. Our new combined epicentre map was made using a total station, which includes fine topographic

detail (shots taken approximately every 2 m on a grid) along with our rectilinear interpretation. Our epicentre reconnaissance identified 20 major structures (the tallest, Str. 3, measuring 7.5 m), 4 plazas, and a sache, as well as 14 uncarved granite monoliths, presumably monuments of some sort. The area covers 2.48 hectares, not including the surrounding borrow pits or Strs. 19 and 20, making the monumental core of Alabama slightly larger than that of Nim Li Punit in Southern Belize following the calculation process presented in Houk (2015). Our understanding of Alabama, represented as sequences of maps, will no doubt change over time as new visualization techniques are applied and we are able to incorporate more past and future excavation detail.

Lesson 4: Effaced Earthen-Core Architecture Represents a Unique Challenge

"Meaghan told me we would probably be digging an empty pile of dirt. She wasn't lying" (SCRAP Team Member #5, personal communication, 2017).

Our 2016 season focused on test excavations at settlement sites presumed to represent commoner domestic buildings and associated spaces (Peuramaki-Brown, ed. 2016). As most of the Alabama settlement is located in an active citrus orchard, vs the monumental core which is covered in broadleaf forest, we were prepared for significant disturbance related to the original preparation of the orchard and earlier banana plantation, as well as continued disturbance from various maintenance processes. What we were not entirely prepared for was the destructive ability of ants, spiders, and other



Figure 5. From left to right, compaction test setup at ALA-047A to detect effaced earthen-core (sandy-clay) platform vs. intact granite face at ALA-047B and ALA-047C. Photos © SCRAP 2016.

borrowing creatures within the relatively loose sediments, in addition to the very large taproots from a particular vine that commonly appears in citrus orchards (Figure 4). In addition, armadillo hunting as a form of illicit excavation made an appearance in the monumental core. Each of these taphonomic agents and effects played a significant role in our applied methodologies and hence our documentation strategies.

Previous work in the district mentioned the presence of predominantly sandy-clay for the construction core of monumental construction platforms, mined from surrounding alluvial plains, and faced with granite or other nonlimestone facing blocks and the use of crushed granite as a flooring material at some sites (e.g. Graham 1994; MacKie 1985; Price 1899). Little to no plaster is found in the architecture of the district, likely related to the lack of significant limestone deposits in the region; rather, blocks of slate and granite are often used as paving for the surfaces of monumental platforms. The lack of plastering agents on non-monumental platforms also means pebble/cobble ballast layers are typically absent; this makes identifying the actual surfaces of smaller platforms, if they survive, quite difficult to overburden distinguish from sediments, including colluvium. Most platforms also lack artifacts within their construction core, and were

often missing their granite facings, either partially or completely removed in antiquity, if present to begin with. Thus, resulting in only minimal fallen or slumped stone material at some sites, making it even more difficult to distinguish the actual surfaces of platforms.

At the largest platform that we tested in the Alabama settlement, just over 2 m tall, these issues required us to develop a compaction test to approximate where exactly the platform stratigraphy started within the mound (Figure 5). At the smallest platform, the careful noting of where artifacts were and were not encountered also helped to delineate the exterior from the interior of the platform. Additionally, recording even the most minute of details in stratigraphy was at times our only key to understanding a domestic platform. On the other hand, other platforms were very clearly discerned based on the intact granite facings-easily located by 'probing' with a machete to find intact alignments-and crushed granite lenses (former surfaces). In upcoming seasons, we will better test the methodology for dealing with effaced earthen-core architecture that was recently proposed by Brouwer Burg et al. (2016). After our season of testing in the citrus orchard, it was determined that, despite difficulties, these excavations are worthwhile as there appears to be far more in the way of material culture

(artifacts) associated with settlement mounds and non-mounded areas than is typically encountered with the monumental architecture of the district.

Lesson 5: Pottery is Still Valuable without Type-Variety

"Elizabeth Graham always told me that the pottery of Stann Creek was horrible. I didn't really believe her. I do now" (SCRAP Team Member #2, personal communication, 2017).

"I'm super jealous. Probably the first time anyone has ever said that about the Stann Creek Assemblage" (SCRAP Team Member #6 commenting on recent petrographic study results, personal communication, 2017).

Since we first contemplated work in the Stann Creek District, we were warned to be prepared for no artifacts in construction core material (as mentioned above) and for really poor pottery due to the highly erosive, acidic soils of the district. The pottery we found during our 2015 surface collection was in tolerable with some surviving slips and shape, decorations; however, materials below ground surface typically have no surviving surface treatments. Pottery materials from the predominantly clay occupation horizon-the surface atop of which the domestic platforms were constructed-is often reduced to red smears that have the shape of a pottery sherd, but no consistency. As a result, type-variety analysis, which depends heavily on surface treatment, is difficult if not impossible with the Alabama assemblage. The forms can provide us with an idea of time period, as can some wares/fabrics; however, the most useful information comes from source characterization and technology studies.

Since 2015, we have been working on preliminary petrographic studies of both clays collected from the Alabama area and pottery recovered from surface collection. This study has proven helpful in providing preliminary macrovisual, microvisual, and technological descriptions of the most common pottery fabrics recovered at Alabama, and has demonstrated the presence of locally-manufactured (within 10 km) wares and the use of local clay-like sediments for construction daub; non-local wares include one that originates to the south in the Bladen as well as one to the north near the Hummingbird; and even grog from vessels produced in the Belize Valley, used in another possible locallymanufactured ware (Peuramaki-Brown and Howie 2017). Ongoing petrographic analysis will help us to create a typology for the area, and to better understand certain human-resource relationships of the Alabama Maya to compare with resource use by the modern Maya of the Alabama area (Toledo Maya Cultural Council & Alcaldes Association 1997:112-113).

Lesson 6: Responsible Use of Appropriate Visualization Techniques is Essential

"The Care Bear drawing? More information would be nice" (SCRAP Team Member #7, personal communication, 2017).

In addition to more intensive artifact studies, such as our pottery petrography, basic artifact analysis and documentation is critical to any archaeology project. We have learned that the visualization of artifacts, particularly through illustration, photography, and 3D model generation, is critical to capturing as much data as possible. It is also in critical to our ability to convey information regarding special finds to our colleagues and community members. Unfortunately, multiple visualization methods have not always been employed in the district, for a variety of reasons; previously produced 'illustrations', such as the 'Care Bear' stone, leave much to be desired and many questions unanswered (see MacKinnon 1988a: fig. 1).

The SCRAP team has made a point of using multiple visualization methods for our small finds documentation and analyses, including photography, illustration, and 3D scanning, alongside standard measuring, colour designations, and other quantitative and qualitative description (Figure 6). Starting in 2018, we will also be incorporating 3D scanning of excavations into our 3-prong visualization strategy. In addition to serving analysis and



Figure 6. From left to right, artifact photography, technical illustration, and 3D scan/model. Images © SCRAP 2016.

outreach purposes, these visual aids will be used in the creation of an online artifact catalogue, as well as an Open Education Resource called the Athabasca University Virtual Archaeology Lab that consists of basic introductory lab exercises for new archaeology students.

Lesson 7: Archaeology Isn't About Finding "Temples in the Jungle"

"I didn't really realize that some centers are overgrown and difficult to access. I had seen photos of ancient Maya centres and assumed they always looked that way, but seeing the centre at Alabama made me realize how much work goes into making a site 'tourist ready" (SCRAP Team Member #1, personal communication, 2017).

One of our favourite lessons to-date, because it is one we often forget, was from a project member who came to the Maya area for the first time. They had been previously taught about Maya archaeology in the jungle, but the only images ever shown in class or in textbooks were of consolidated buildings within the jungle. Seeing what is actually meant by "temples in the jungle"-completely covered platformmounds-was new to them, and reminds us of what tourists to the region might expect to see vs. some of the reality of archaeological sites in As a result, we believe it is very Belize. important to convey both the nicely consolidated buildings of sites such as Cahal Pech alongside

those still 'in the bush', such as many of the amazing platform-mounds of sites such as El Pilar. Making sure tourists visit both types of settings helps to emphasize this lesson and to demonstrate how much work goes into tourism development in Belize.

It is also worth noting that in a study by Ramsey and Everitt (2008) involving interviews with tourists and Belizeans regarding site development in the Cayo District, the most common observation was the need for more educational value when it comes to visiting sites, but that this did not necessarily go hand-in-hand with the need or desire for more consolidation. In fact, the ability to see sites "in nature" as opposed to consolidated was identified as important, and that simply increased amounts of tour guide information, museums, and maps were what was actually desired for more quality, educational experiences. These possibilities could easily be extended to the use of augmented reality applications at sites, where original buildings could be 'seen' using portable tablets or smartphones at trigger points on the landscape; thus, eliminating the need for increasingly expensive consolidation efforts. We are currently applying for funds to test such emerging technology at Alabama, for the purpose of locally-oriented education and outreach.

Lesson 8: Archaeology is a Team Effort

"Just because you don't speak the same

language as someone else doesn't mean you can't learn from each other" (SCRAP Team Member #3 commenting on working with older Maya field assistants, personal communication, 2017).

"Building relationships with people in the area where you are working is just as important as the actual archaeology" (SCRAP Team Member #8 commenting on our community outreach and engagement efforts, personal communication, 2017).

Our final lesson is acknowledging how much of a team effort archaeology really is. Not only among the archaeologists themselves, but with our entire crew, collaborators, local community members and leaders, property owners, government representatives, cultural associations, wilderness societies, etc. The list is never ending and we wish to make it clear that none of our research is possible without this team approach. We look forward to expanding our networks in upcoming seasons when we have our first archaeological field school at Alabama in 2018; continue expanding our focus toward the site of Pearce and understanding its relationship with the Alabama Maya; and new incorporations of geomorphological and botanical studies in both areas.

With this paper, it is not our intention to be patronizing or to diminish the work of our colleagues. Rather, we hope that these few lessons that we ourselves have had to re-learn, through their specific contextualization within the aims and operations of the Stann Creek Regional Archaeology Project, can serve to remind us and others of some of the littlediscussed realities of archaeological field work.

Acknowledgements We would to say thank you and *botik* to many individuals, institutions, associations, and businesses for their support over the first three years of fieldwork at Alabama, as well as the preliminary reconnaissance trip at Pearce. These include all SCRAP 2014-2016 team members; Mr. Greene and Ms. Canton of Greene Groves; Mr. Chiac and the Maya Mopan Village Council; Mr. and Ms. Teul of Miss Juana's Kitchen; Mr. Sansone and Cardie's Hotel; Dr. Morris and the staff of the Belize Institute of Archaeology; Ms. Alpuche of the National Archives of Belize; Mr. Coc and Belize Audubon Society; Mr. Arana and the Stann Creek House of Culture; Drs. Graham, Dunham, and Prufer. This research was funded by grants from the Social Science and Humanities Research Council of Canada and the Research Centre at Athabasca University, as well as a crowdsourced funding initiative through Experiment.com.

References

Brouwer Burg, Marieka, Astrid Runggaldier, and Eleanor Harrison-Buck

2016 The afterlife of earthen-core buildings: A taphonomic study of threatened and effaced architecture in Central Belize. *Journal of Field Archaeology* 41(1):17-36.

Dunham, Peter, 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, Belize Audubon Society, Belmopan, Belize; The National Geographic Society, Washington, D.C.; KeyCorp, Cleveland, OH; The Dart Foundation, Mason, MI.

Gann, T.W.F.

1918 The Maya Indians of Southern Yucatan and Northern British Honduras. Bureau of American Ethnology Bulletin No. 64. Smithsonian Institution, Washington, D.C.

Graham, Elizabeth

- 1976 Archaeology of the Stann Creek District, Belize. Stann Creek Project 1975 Interim Report. Centre of Latin American Studies, University of Cambridge.
- 1978 Archaeological Investigations in the Stann Creek District. *Belizean Studies* 6(4):16-26.
- 1982 The Highlands of the Lowlands: Environment and Archaeology in the Stann Creek District, Belize, Central America. Unpublished PhD dissertation, University of Cambridge, Great Britain.
- 1985 Facets of Terminal to Post-Classic Activity in the Stann Creek District, Belize. In *The Lowland Maya Postclassic*, edited by A. F. Chase and P. M. Rice, pp. 215-229. University of Texas Press, Austin.

- 1986 Barton Ramie Ceramic Types at Colson Point, North Stann Creek: A Focus on the Protoclassic. *Ceramica de Cultura Maya* 14:32-38.
- 1987 Resource Diversity in Belize and its Implications for Models of Lowland Trade. *American Antiquity* 52:753-767.
- 1989 Brief Synthesis of Coastal Site Data from Colson Point, Placencia, and Marco Gonzalez, Belize. In *Coastal Maya Trade*, edited by H. McKillop and P. F. Healy, pp. 135-154. Trent University, Occasional Papers in Anthropology, No. 8. Peterborough, Ontario.
- 1994 The Highlands of the Lowlands: Environment and Archaeology in the Stann Creek District, Belize, Central America. Monographs in World Archaeology No. 19. Prehistory Press, Madison, Wisconsin and The Royal Ontario Museum, Toronto, Ontario.
- 2001 Stann Creek District. In Archaeology of Mexico and Central America: An Encyclopedia, edited by S. Toby Evans and D. L. Webster, pp.684-686. Garland Publishing, New York.

Houk, Brett A.

- 2015 Ancient Maya Cities of the Eastern Lowlands. University of Florida Press, Gainesville.
- Joyce, T.A.
 - 1931 Report of the British Museum Expedition to British Honduras, 1931. Unpublished manuscript. Copy on file in the Latin American Library at Tulane University (Rare Collections, RBC 972.82(910) J89 1 LAL).

Kidder, A.V., and Gordon F. Ekholm

1951 Some Archaeological Specimens from Pomona, British Honduras. Notes of Middle American Archaeology and Ethnology, Carnegie Institution of Washington, Division of Historical Research No.102, Feb. 16, 1951:429-437.

MacKie, Euan W.

1985 Excavations at Xunantunich and Pomona, Belize, in 1959-60. BAR International Series 251. British Archaeological Reports, Oxford, Great Britain.

MacKinnon, J. Jefferson

- 1986 In Search of the Ancient Maritime Maya. *Wisconsin Academy Review* 32(3):111-122.
- 1988a Point Placencia Archaeological Project Belize, Central America: Excavations at C'hacben K'ax, Alabama, Stann Creek District, Belize, 1986-88. Report submitted to Department of Archaeology, Belmopan, Belize.

- 1988b C'hacben K'ax, 1985-88: Excavations at Alabama, Stann Creek District, Belize. Report submitted to Department of Archaeology, Belmopan, Belize.
- 1989a Coastal Maya Trade Routes in Southern Belize. In *Coastal Maya Trade*, edited by H. McKillop and P. F. Healy, pp. 111-122. Trent University Occasional Publications in Anthropology, no. 8. Peterborough, Ontario.
- 1989b 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.
- 1989c Preliminary Report of the Point Placencia Archaeological Project: Consolidation of the Ballcourt at C'hacben K'ax and Archaeological Survey of the Northern Cays of the Stann Creek District, Belize.
- 1990 Tobacco Range, South Water Cay, Placencia Cay and Maya Sea Trade Routes in Belize. *Mexicon* 12(4):75-78.

MacKinnon, J. Jefferson, and Susan M. Kepecs

1989 Prehispanic Saltmaking in Belize: New Evidence. *American Antiquity* 54(3):522-533.

MacKinnon, J. Jefferson, and E. May

- 1990 Small-Scale Maya Lime Making in Belize: Ancient and Modern. Ancient Mesoamerica 1(2):197-203.
- 1991 The Ballcourts of C'hacben K'ax and its Neighbors: The Maya Ballgame and the Late Classic Colonial Impulse in Southern Belize. In *The Mesoamerican Ballgame: papers presented at the international colloquium "The Mesoamerican Ballgame 2000 BC-AD 2000, Leiden, June 30th-July 3rd, 1988"*, edited by G.W. van Bussel, P. L. F. van Dongen, and T. J. J. Layenaar, pp.71-80. Rijksmuseum voor Volkenkunde, Leiden

MacKinnon, J. Jefferson, Jeffrey M. Olson, and Emily M. May

1993 "Megalithic" Maya Architectural Features at the site of Chacben Kax, Alabama, Stann Creek District, Belize, CA. *Mexicon* 15(1):1-4.

Mitchell-Hedges, Frederick W.

- 1931 Land of Wonder and Fear. Century and Co., New York
- Peuramaki-Brown, Meaghan M.
 - 2016 Settlement and Resource Development at Alabama, Belize: Past, Present, and Future Investigations. *RRBA* 13:239-250.

- 2017 Revisiting the Ancient Maya of Alabama, Belize: Description, Recent Research, and Future Directions. *Mexicon* 39:64-72.
- Peuramaki-Brown, Meaghan M. (editor)
 - 2016 The Stann Creek Regional Archaeology Project: Report of the Third (2016) Field Season. Report presented to the Belize Institute of Archaeology, Belmopan, Belize.
- 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 Annual Meetings of the Society for American Archaeology, Vancouver, British Columbia, Friday, March 31, 2017.
- Peuramaki-Brown, Meaghan M., and Shawn G. Morton
 - 2016 The 2016 Reconnaissance of the Pearce Sites of the Cockscomb Basin Reserve. In *The Stann Creek Regional Archaeology Project: Report of the Third* (2016) *Field Season*, edited by M. M. Peuramaki-Brown, pp.111-124. Report presented to the Belize Institute of Archaeology, Belmopan, Belize.

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

2017 Phase I Reconnaissance (2014-2015) at Alabama: A Summary of SCRAP Investigations in East-Central Belize. *Research Reports in Belizean Archaeology* 14:299-309.

Picoult, Jodi

- 2007 Vanishing Acts. Simon and Schuster, New York.
- Price, H. W., Esq.
 - 1899 Account of excavations on Sittee River, British Honduras. *Society of Antiquaries*, Feb. 16, 1899.

Ramsey, Doug, and John Everitt

2008 If you dig it, they will come! Archaeology heritage sites and tourism development in Belize, Central America. *Tourism Management* 29:909-916.

Sills, Cory

2016 Re-evaluating the ancient Maya salt works at Placencia Lagoon, Belize. *Mexicon* 38(3):69-74.

Stomper, Jeffrey, Wendy Brown, and Elizabeth Pope

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

Toledo Maya Cultural Council and Toledo Alcaldes Association

1997 Maya Atlas: The Struggle to Preserve Maya Land in Southern Belize. North Atlantic Books, Berkeley, California. Walters, Gary Rex

1988 Field Report Dec. 1987-Jan. 1988, Chacben Kax, Point Placencia Archaeological Project. Report submitted to Department of Archaeology, Belmopan, Belize