Impact case study (REF3b)

Institution: University College London

Unit of Assessment: 17A – Geography, Environmental Studies & Archaeology: Archaeology

Title of case study: Supporting tourism and recognition of Maya heritage at Lamanai and on Ambergris Caye

1. Summary of the impact (indicative maximum 100 words)

Elizabeth Graham’s model of long-standing engagement and research at specific Maya sites in Belize has led to significant partnerships with local communities as well as tourist and heritage organisations. At Lamanai, where Graham has worked for over 15 years, research enabled the Belize tourism authorities to develop the site, benefiting 212,800 visitors during 2008–2013. This partnership led to an invitation to work at the Marco Gonzalez site on Ambergris Caye, where research has facilitated the development of the site virtually from scratch and created a new recognition of Maya heritage on the caye.

2. Underpinning research (indicative maximum 500 words)

The Lamanai Archaeological Project (LAP) in Belize focuses on crises in Maya history, and in particular, little-known periods of transition including the early Maya florescence, the Maya collapse and the Spanish and British colonial periods (thus covering the period from 900 BC to AD 1900). This research differs from most Maya studies, which are concerned with the florescence of Maya civilisation and cover a period that ends in the 9th–10th century AD.

Elizabeth Graham (Professor of Mesoamerican Archaeology; employed at UCL since 1999) has directed LAP since 1997 and has overseen archaeological excavations at both Lamanai (once a considerable Maya city) and the related site of Marco Gonzalez on the nearby island of Ambergris Caye. Scott Simons of the University of North Carolina Wilmington, who directed the Maya Archaeometallurgy Project and co-directed the field school, was co-PI at Lamanai from 2003–12 and has been co-PI at Marco Gonzalez from 2010–present. Excavations at both sites have resulted in the collection of evidence that dispels the notion of widespread collapse, and have revealed a number of connected communities that resisted collapse and continued to thrive.

Marco Gonzalez is one of the few coastal sites for which data are available for the Postclassic to Colonial transition. Excavations here reveal that during its long, continuous occupation, the inhabitants were embedded in trade and exchange networks involving supplies of stone tools obtained from the mainland [b, f]. This work strongly suggests that though the Spanish arrival changed Maya life in many ways, communities along the coast were still able to use these networks to access obsidian, primarily from the Guatemalan highlands [d]. With comparatively good access to obsidian for blade production, the Marco Gonzalez site appears to have been an important way station for moving goods up and down the coast and for funnelling resources via a coastal-inland trade network.

Examination of burial sites at Lamanai and Marco Gonzalez enabled Graham and her colleagues to propose that dramatic changes in funerary practices at the end of the Classical Maya period reflected not just a ‘religious’ change, but a qualitative transformation in how wealth and power were appropriated, similar to that which occurred during the Spanish Conquest [a].

Such evidence has been used to connect the Maya (and Belize’s) deep past to present-day communities – a key aspect of Graham’s work. A specific goal of the project was to implement and develop best archaeological practice by integrating research results into community outreach, by providing local training and economic opportunities, and by working with local heritage interests and cooperatives. Since 2009, the LAP has concentrated its efforts on cultural heritage issues including increased access to on-site collections; local conservation and conservation training; and collections research.

3. References to the research (indicative maximum of six references)


4. Details of the impact (indicative maximum 750 words)

The Lamanai Archaeological Project is an example of long-term fieldwork embedded in a community. With decades of ongoing relations, it is difficult to isolate specific impacts of research. Instead the impact needs to be viewed holistically. Over the years, the LAP has been instrumental in developing both the site and access to its rich finds for visitors, and in contributing to the local community of Indian Church Village by facilitating the tourism industry and providing vital skills training. In 2001–2005, the Belize Government’s Tourism Development Project worked with Graham’s team to excavate and conserve the Maya buildings on the site (including the Palace courtyard group and the two churches) and to develop a visitor centre here [1]. Lamanai is amongst the most visited Maya sites in Belize, and these improvements form the core of its offering to the over 212,800 people who visited the site in 2008–2013. By contrast, in the equivalent time period before the tourism development project began (1995–2000), the site was visited by only 93,200 visitors or less than half those recorded during the impact period [1]. The ongoing significance for visitors is demonstrated by the reviews the site continues to receive from tourists and travel books – on Trip Advisor, for example, the Lamanai Archaeological Reserve is rated 4.5/5, with all but 4 of 169 ratings (2011–2013) ‘very good’ or (predominantly) ‘excellent’ [2].

The research project has been vital in creating economic development in this historically deprived area. This is achieved through the increased employment potential, but also through skills development. A specific example during the impact period is the direct impact of Graham’s research on 16th century Spanish churches at Lamanai [b, e] which informed the Belize Institute of Archaeology’s consolidation and reconstruction of the churches to reinstate them as important historical landmarks, and provided specialised training for the Orange Walk Tour Guide Association in nearby Orange Walk Town [1] to ensure that they used the latest findings in their work. This, and other research, also informs the interpretation at the site itself. Community development activities accompanying the research have included training in jewellery making and the development of an artisan centre at Indian Church, the village of 300 people where Lamanai is located [1]. This example of a long-term engagement with a site and the surrounding community was an important factor in Graham’s subsequent research and community development initiatives on Ambergris Caye.

Tourism is the second-largest industry in Belize and with the largest barrier reef in the western hemisphere, Ambergris Caye is one of the country’s most important diving destinations. As a result Mayan heritage has not formed a strong part of the sense of place and identity of its main settlement, San Pedro, although most San Pedranos themselves are almost certainly descendants of east coast Maya who staunchly resisted the Spanish invasion. In 2008, however, a plan for a condominium development (called South Beach) galvanised a younger generation of San Pedranos to protect the island’s archaeological heritage, centred in the small site of Marco Gonzalez. As a result of the example provided by the nearby Lamanai Archaeological Project, and knowing that Graham had participated in a reconnaissance of Marco Gonzalez (with David Pendergast) in the 1980s, the Director of the Belize Institute of Archaeology invited her to liaise with the then-nascent Marco Gonzalez Maya Site Ambergris Caye (MGMSAC) preservation group in 2009 [1].
The Director used Graham’s prior research (e.g. [d,f]) to argue for the importance and extent of this site and indicate that the Belize Institute of Archaeology, which has oversight of the country’s archaeological resources, would challenge this plan [3]. Simultaneously, Graham launched a new archaeological project at the site that demonstrated and cemented its importance and contributed to the call for a buffer zone to protect it. For the first time, residents of Ambergris Caye were galvanised to protect this Maya site and challenge the proposed development. This was reflected in the news coverage in local papers, such as the San Pedro Sun, and in 2010, led to the site becoming Belize’s first Maya archaeological reserve located on an island, and to the institution of a buffer zone [4]. Due to the economic climate, the development was subsequently suspended.

Thus Graham’s research was instrumental in providing the evidence base to have Marco Gonzalez declared a protected site, and thus prevent catastrophic damage. It was also instrumental in bringing a new awareness of the richness of their Maya history amongst San Pedranos, and a realisation of the periods of transition and external contact through which Maya culture and heritage survived to the present day. It is important to note that the site itself contains no surviving monuments; thus the finds, the activities of the field school and the underpinning research, are essential to bring this period alive in the minds of visitors [5]. Those findings thus continue to inform educational and tourism activities at the site, and are an important factor in MGMSAC’s fundraising and awareness activities [5]. For example, the MGMSAC website (http://www.marcogonzalezmayasite.com) draws on both findings and research activities to explain the importance of the site and evoke its past [6].

When research began at Marco Gonzalez, access was via a 45 minute trek through a mangrove swamp. Providing access, therefore, was a major priority for MGMSAC. For the 2010 field school, a 433 metre walkway was built for the site. This provided essential access for the school, but also a permanent benefit for the island and its heritage community in developing a blueprint for environmentally sensitive access. For the first time, therefore, it was possible to bring tours to the site [6]. As awareness amongst visitors grew, from 2012, the San Pedro Town Council began to proactively repair the road leading to the site, demonstrating its increasing profile [9]. By 2011 traffic was sufficient that MGMSAC hired and housed a caretaker on site from visitor fees [5].

The ongoing research enabled MGMSAC to apply successfully for the funding required to develop it as a heritage tourism site on a caye previously best known for water sports. The archaeological and heritage evidence was used by MGMSAC to launch a vigorous awareness and fundraising campaign, including developing a range of souvenirs, and to argue for the need for a visitor centre. As a result, in November 2011, MGMSAC had raised US$40,000 for the site [7] including donations from the Frederick Upton Foundation to improve interpretation and signage using reports written by Graham and Simmons for the National Institute of Culture and History (the parent body of the Belize Institute of Archaeology). These were also used to develop a guide narrative [5].
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To develop the site as a central part of the caye’s heritage, the research project provided the information underpinning cultural and learning resources to facilitate school and tourism visits. In 2011, a brochure was developed summarising the research findings and introducing the site. In 2013, funding amounting to 1500 USD was received to develop this further into a full-fledged guidebook. According to the reports delivered by the MGMSAC to the National Institute of Culture and History (the parent body of the Belize Institute of Archaeology), the site received 274 visitors during its first year (February–December 2011), rising to 617 in its second (2012). In the first quarter of 2013 alone, the site received 286 visitors, showing its growing popularity [8]. These visitor numbers are small compared to larger Maya sites, such as Lamanai. Yet for the 14,000 inhabitants of Ambergris Caye, they indicate an unprecedented appreciation of the island’s Maya heritage. The MGMSAC and the researchers actively use the findings from the site to promote this. This has included, for example, leaflets provided at hotels and tourist offices. Regular Archaeology Days and Exhibitions are held in San Pedro, at popular locations such as Fido’s Courtyard, the largest beach bar on the island (20–23 June 2012), or at the Belize Yacht Club (8 July 2010) [12]. These introduce town residents and visitors, both children and adults, to research findings, and are accompanied by talks from Graham and members of MGMSAC.

The increasing profile of the site – and of the island’s heritage – is demonstrated by the fact that San Pedranos are now actively investing in it. As described earlier, the Town Council has taken responsibility for maintaining access roads [9], and local residents and businesses donate financially and in kind [9]. Research findings are keenly covered in the local press [10]. Also reflecting this recognition is the fact that school engagement is now a regular activity. The project runs the Ambassadors of the Past programme which brings two ethnic Maya university students to the caye to deliver talks to school children about the place of Marco Gonzalez in Belize’s Maya heritage – about 300 children attended talks in 2012, the first year, and the programme was repeated in 2013 [11].

5. Sources to corroborate the impact (indicative maximum of 10 references)

[1] Statement and visitor figures to October 2013 provided by the Director, Belize Institute of Archaeology. Photo of Graham’s training session for Orange Walk guides available on request.


[4] Declaration of first Maya archaeological reserve covered in the San Pedro Sun, 9 September 2010 (available on request). Plan of buffer zone available on request.

[5] Statement provided by the MGMSAC Chairman of the Board.


[7] Awareness and fundraising, e.g. see The San Pedro Sun ‘Board of directors launch 2012 Marco Gonzalez Archaeological Reserve calendar’ (17 November 2011) (includes funds raised to date), available on request; ‘Marco Gonzalez Maya Site Project receives donation’ (13 December 2012), available on request.

[8] Copies of monthly and annual reports delivered by MGMSAC to the National Institute of Culture and History are available on request. News coverage and photos of school tours are available on request.

[9] Letter to the Editor from MGMSAC in Ambergris Today (23 July 2012) acknowledging council road building, and another in The San Pedro Sun (26 July 2012) acknowledging businesses and individuals for their contributions, both available on request.

[10] Press clippings available on request.

[11] Press clipping describing the Ambassadors of the Past programme run by Dr Scott Simmons and introducing young residents to Maya heritage. The San Pedro Sun 14 June 2012 available on request.

[12] Event announcements for Archaeology exhibitions and workshops, available on request.