

Article

Thirty-Two Years of Integrating Archaeology and Heritage Management in Belize: A Brief History of the Belize Valley Archaeological Reconnaissance (BVAR) Project's Engagement with the Public

Julie A. Hoggarth ^{1,*†}, Jaime J. Awe ^{2,3,*†}, Claire E. Ebert ⁴, Rafael A. Guerra ^{3,5}, Antonio Beardall ^{2,3}, Tia B. Watkins ⁶ and John P. Walden ⁴

¹ Department of Anthropology and Institute of Archaeology, Baylor University, Waco, TX 76706, USA

² Department of Anthropology, Northern Arizona University, Flagstaff, AZ 86011, USA; arb832@nau.edu

³ Institute of Archaeology, National Institute of Culture and History, Belmopan, Belize; rguerra@unm.edu

⁴ Department of Anthropology, University of Pittsburgh, Pittsburgh, PA 15260, USA; claire.ebert@nau.edu (C.E.E.); jpw61@pitt.edu (J.P.W.)

⁵ Department of Anthropology, University of New Mexico, Albuquerque, NM 87131, USA

⁶ Institute of Archaeology, University of London, Bloomsbury, London WC1H 0PY, UK; tia.watkins.18@alumni.ucl.ac.uk

* Correspondence: Julie_Hoggarth@baylor.edu (J.A.H.); Jaime.Awe@nau.edu (J.J.A.); Tel.: +1-254-710-6226 (J.A.H.)

† These authors contributed equally to this work.

Received: 31 May 2020; Accepted: 30 June 2020; Published: 5 July 2020



Abstract: Since its inception in 1988, the Belize Valley Archaeological Reconnaissance (BVAR) Project has had two major foci, that of cultural heritage management and archaeological research. While research has concentrated on excavation and survey, the heritage management focus of the project has included the preservation of ancient monuments, the integration of archaeology and tourism development, and cultural heritage education. In this paper, we provide a brief overview on the history of scientific investigations by the BVAR Project, highlighting the project's dual heritage management and research goals. This background offers the basis in which to discuss the successes and challenges of the project's efforts in cultural heritage management and public engagement, particularly in early conservation efforts, in its training and educational efforts, and its ongoing outreach activity. We emphasize the need to train Belizeans as professional archaeologists and conservators, to serve as the next generation of advocates for Belize's heritage management. We offer some ideas on how research projects can make significant contributions to heritage education and preservation in the developing world.

Keywords: Maya archaeology; cultural heritage; tourism; conservation; education; Belizean archaeology

1. Introduction

As archaeology has progressed as a discipline, a variety of archaeological methods and theories have placed an increasing focus on public archaeology that makes archaeological research more inclusive. The development of post-processualism was particularly important in understanding the need for multivocality in the conveyance of archaeological knowledge to a wide range of audiences and stakeholders. Today, archaeologists recognize that they cannot detach their field programs from efforts to communicate information to the public [1]. This broader focus has also identified tensions between different segments of society, with archaeology often being appropriated by the media, public discourse, national identity building, and the conservators of cultural heritage. These developments are clearly identifiable in Maya archaeology, where continuing archaeological research is used for development

between different segments of society, with archaeology often being appropriated by the media, 700 public discourse, national identity building, and the conservators of cultural heritage. These developments are clearly identifiable in Maya archaeology, where continuing archaeological research is used for development efforts by Mundo Maya countries (Belize, Mexico, Guatemala, Honduras, 700 efforts by Mundo Maya countries (Belize, Mexico, Guatemala, Honduras, and El Salvador). Researchers are therefore of particular importance to the pulgata the complex processes of these projects that both perpetuate the past and the history of the Belize Valley [A]. Archaeological Reconnaissance (BVAR)

Project this research will describe the history of the Belize Valley Archaeological Reconnaissance (BVAR) Project's research and publicize the immense responsibility our project directed by Belizean and foreign archaeologists, Belize and to disseminate that information to the Belizean public. First, we describe the cultural heritage of Belize and to disseminate that information to the BVAR Project's regional archaeological investigations. This history helps to frame the lessons learned by the project's conservation efforts, its training and educational initiatives undertaken over the past 30 years, and our ongoing diverse heritage management programs. Our efforts aimed at identifying the diverse goals and interests of stakeholders are critical for designing a more inclusive project attuned to the needs of cultural heritage management in Belize [3].

2. Project History

Cultural heritage management initiatives have been a major focus of BVAR archaeologists since its inception in 1988, created and directed by Jaime Awe and jointly administered with Co-Directors Julie Hoggarth, Claire Ebert, and Rafael Guerra, and Assistant Director John Walden. A major concern for the project is the protection of cultural resources in Western Belize (Figure 1), which is, in fact, clearly defined in the project's first annual progress report in which Awe and Campbell [4] stated the following:

"The reason for investigating Cahal Pech were, and are, developmental and research oriented. In reference to the former our objectives were to, (1) halt further destruction of the center, oriented. In reference to the former our objectives were to, (1) halt further destruction of the center, (2) produce a map of the site demarcating an area to be established as a National Park, center, (2) produce a map of the site demarcating an area to be established as a National Park, and (3) obtain the data necessary to publish a preliminary guidebook for use in schools and for Park, and (3) obtain the data necessary to publish a preliminary guidebook for use in schools promoting tourism. Our research interests were concerned with the diachronic development of the site, plus a study of the architectural, artistic and socio-political relationship between development of the site, plus a study of the architectural, artistic and socio-political relationship between Cahal Pech and sites in the Belize River Valley Region" [4] (pg. 1).

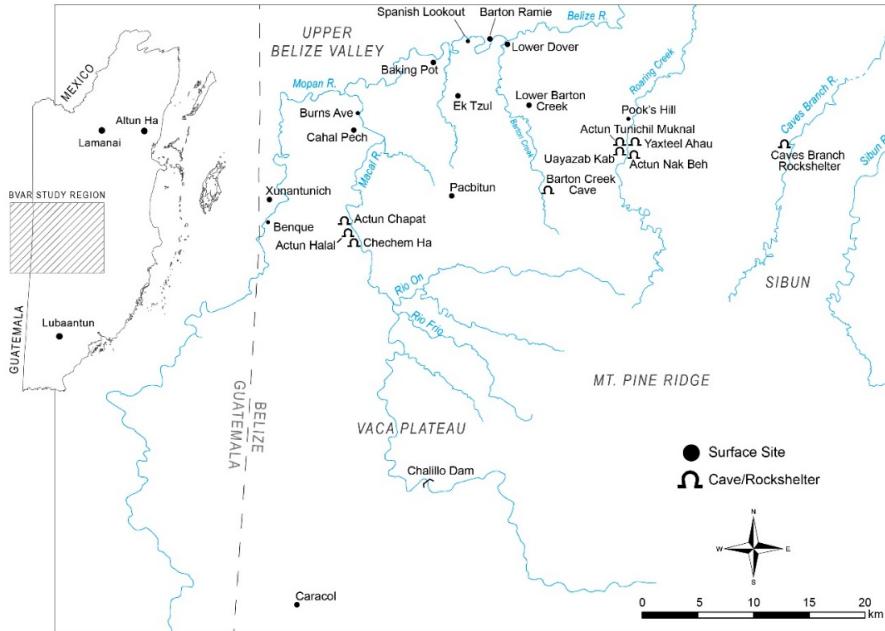


Figure 1. Map of western Belize, showing the locations of BVAR research and conservation projects conducted between 1988 and 2020. Map by C.E. Ebert.

This dual research and heritage management focus has continued to guide the project throughout its history, working at more than 30 surface and cave sites throughout the project's history (Table 1).

Upon the official inception of the BVAR Project, research was focused within the site core at Cahal Pech [4]. Subsequent years saw continuing investigations within the monumental epicenter as well as excavations across the site's periphery [5]. Awe's [6] seminal research offered important information on the Preclassic Maya, establishing the Cunil ceramic complex through radiocarbon and ceramic data, identifying some of the earliest evidence of sedentary villages in the Maya Lowlands dating to ~1000 cal BC, documenting round structures that likely served as performance platforms for Preclassic community ritual, and recording the largest Preclassic figurine collection in Belize. These findings transformed what we knew about the ancient Maya during a time when most research was concentrated on the Classic period. Additionally, development around the modern town of San Ignacio threatened the destruction of peripheral groups around Cahal Pech, so the recovery of archaeological remains in the settlement was also of vital importance for understanding Cahal Pech's political development and decline. To address these dual goals, the project's research efforts were expanded in 1991 to explore the peripheral settlement groups around the site core [7] including the K'ik [8], Tolok [9], Cas Pek [10], Tzinic [11], Zotz [12], and Zubin [13] settlement clusters.

Table 1. History of scientific research and conservation projects affiliated with the BVAR project and its predecessors, including a list of project directors and select research staff leading major projects. BVAR research reports and MA theses/PhD dissertations can be found at www.bvar.org/publications.

Sub-Project Name/Acronym	Year(s)	Sites Investigated	Directors and Senior Staff	Research Report/Publication
Ancient Maya Agriculture Project (AMPa)	1979–1987	Caracol Caledonia Pacbitun	Paul Healy Jaime Awe	Awe, MA (1985) Bill, MA (1989)
	1988–1996	Cahal Pech (site core and periphery)	Jaime Awe Jim Aimers Cassandra Bill Shawn Brisbin Mark Campbell David Cheetham Jim Conlon Sean Goldsmith Gyles Iannone Terry Powis Sonja Schwake Rhan-Ju Song Kay Sunahara James Stemp Norbert Stanchly	BVAR 1988 Field Season BVAR 1989 Field Season BVAR 1990 Field Season BVAR 1991 Field Season BVAR 1992 Field Season BVAR 1993 Field Season BVAR 1994 Field Season, Vol 1 BVAR 1994 Field Season, Vol 2 BVAR 1995 Field Season BVAR 1996 Field Season Awe, PhD (1992) Powis, MA (1996) Iannone, MA (1993) Ph.D. (1996) Goldsmith, MA (1993) Cheetham, MA (1998) Schwake, MA (2000)
	1992–1996	Baking Pot (site core and periphery)	Jaime Awe Jim Aimers Carolyn Audet Jim Conlon Jennifer Ehret Josalyn Ferguson Charles Golden Gyles Iannone Alan Moore Jennifer Piehl	BVAR 1992 Field Season BVAR 1993 Field Season BVAR 1994 Field Season, Vol 1 BVAR 1994 Field Season, Vol 2 BVAR 1995 Field Season BVAR 1996 Field Season Ferguson, MA (1999) Moore, PhD (1999) Audet, Honors (2000) Aimers, PhD (2002) Piehl, PhD (2005)

Table 1. Cont.

Sub-Project Name/Acronym	Year(s)	Sites Investigated	Directors and Senior Staff	Research Report/Publication
	1997	Pacbitun	Jaime Awe Bobbi Hohmann Terry Powis	BVAR 1997 Field Season Hohmann, PhD (2002)
Western Belize Regional Cave Project (WBRCP)	1997–2003	Actun Tunichil Muknal (ATM) Actun Uayazaba Kab Actun Yaxteel Ahau Actun Chapat Actun Nak Beh Barton Creek Cave Actun Halal Rockshelter Actun Oxyehub Cueva Migdalia Actun Chuplal Chechem Ha cave Pook's Hill	Jaime Awe Cameron Griffith Holley Moyes Joselyn Ferguson Sherry Gibbs Rafael Guerra Christina Halperin Christophe Helmke Reiko Ishihara Sarah Jack Vanessa Mirro Mike Mirro	BVAR 1997 Field Season BVAR 1998 Field Season BVAR 1999 Field Season BVAR 2000 Field Season BVAR 2001 Field Season BVAR 2002 Field Season BVAR 2003 Field Season BVAR 2007 Field Season Gibbs, MA (2000) Halperin, MA (2000) Morehart, MA (2002) Moyes, MA (2001), Moyes PhD (2006) V.A. Mirro, MA (2002) Jack, BA (2004) M. Mirro, MA (2006) Galvan, MA (2016)
	2000–2004	Baking Pot (site core and periphery)	Jaime Awe Carolyn Audet Antonio Beardall Christine Dixon Rafael Guerra Sue Hayes Julie Hoggarth William Poe Leslie Swain Erin Weller	BVAR 2000 Field Season BVAR 2001 Field Season BVAR 2002 Field Season BVAR 2003 Field Season BVAR 2004 Field Season Audet, PhD (2006)
Tourism Development Project (TDP)	2000–2004	Caracol	Jaime Awe Sherry Gibbs Myka Schwanke Rafael Guerra Erin Weller	BVAR 2002 Field Season
Tourism Development Project (TDP)	2000–2004	Cahal Pech	Jaime Awe Carolyn Audet	Audet, PhD (2006)
Tourism Development Project (TDP)	2000–2004	Xunantunich	Jaime Awe Carolyn Audet	Audet, PhD (2006)
Tourism Development Project (TDP)	2000–2004	Altun Ha	Jaime Awe	
Tourism Development Project (TDP)	2000–2004	Lamanai	Jaime Awe	
Tourism Development Project (TDP)	2000–2004	Lubaantun	Jaime Awe	
Chalillo Dam Mitigation	2003–2005	Upper Macal and Raspaculo River valleys (various sites)	Jaime Awe Rafael Guerra Myka Schwanke Douglas Weinberg	
Roaring Creek Valley	2005–2008	Pook's Hill	Jaime Awe Christophe Helmke Joselyn Ferguson Rafael Guerra Christopher Morehart	BVAR 2005 Field Season BVAR 2006 Field Season BVAR 2007 Field Season Helmke, PhD (2009)

Table 1. Cont.

Sub-Project Name/Acronym	Year(s)	Sites Investigated	Directors and Senior Staff	Research Report/Publication
Caves Branch River Valley	2005–2007	Caves Branch Rockshelter Deep Valley Rockshelter Baateelek	Jaime Awe Rafael Guerra Bryan Haley Jessica Hardy Jillian Jordan Shawn Morton Gabriel Wrobel	BVAR 2005 Field Season BVAR 2006 Field Season BVAR 2007 Field Season Jordan, MA (2008)
	2007	Baking Pot (site core)	Jaime Awe Christophe Helmke Muggs Alexander Julie Knub Jillian Jordan	BVAR 2007 Field Season
	2007–2013	Baking Pot (periphery)	Jaime Awe Julie Hoggarth Sarah Bednar Leann DuMenil Rafael Guerra Jillian Jordan Céline Lamb Eva Jobbova Phylicia Pelayo Josue Ramos Catharina Santasilia Ben Russell Christina Zweig	BVAR 2007 Field Season BVAR 2008 Field Season BVAR 2009 Field Season BVAR 2010 Field Season BVAR 2011 Field Season BVAR 2012 Field Season BVAR 2013 Field Season Jobbova, MA (2009) Johnson, BA Honors (2010) Freiwald, PhD (2011) Hoggarth, PhD (2012) DuMenil, MA (2014)
	2010–2019	Lower Dover (site core)	Jaime Awe Rafael Guerra Marieka Arksey Renee Collins Molly Hude Sasha Romih Tia Watkins Patrick Wilkinson	BVAR 2010 Field Season BVAR 2011 Field Season BVAR 2012 Field Season BVAR 2013 Field Season BVAR 2014 Field Season BVAR 2015 Field Season BVAR 2016 Field Season BVAR 2017 Field Season BVAR 2018 Field Season BVAR 2019 Field Season Kulig, BA Honors (2015) Collins, MA (2018) Romih, MA (2019)
		Lower Dover (periphery)	Jaime Awe Rafael Guerra John Walden Michael Biggie Emma Messenger Michael Petrozza Ian Roa Yijia Qiu (邱益嘉)	BVAR 2013 Field Season BVAR 2014 Field Season BVAR 2015 Field Season BVAR 2016 Field Season BVAR 2017 Field Season BVAR 2018 Field Season BVAR 2019 Field Season Petrozza, MA (2015)

Table 1. Cont.

Sub-Project Name/Acronym	Year(s)	Sites Investigated	Directors and Senior Staff	Research Report/Publication
American Foreign Academic Research (AFAR)-BVAR	2010–current	Cahal Pech (site core)	Jaime Awe Claire Ebert Antonio Beardall Jorge Can C. Mathew Saunders James Garber Sherman Horn Amber Lopez Johnson Anna Novotny Nancy Peniche May Mark Porter Jim Pritchard Kristy Pritchard Catharina Santasilia Marc Zender	BVAR 2010 Field Season BVAR 2011 Field Season BVAR 2012 Field Season BVAR 2013 Field Season BVAR 2014 Field Season BVAR 2015 Field Season BVAR 2016 Field Season BVAR 2017 Field Season BVAR 2018 Field Season BVAR 2019 Field Season Santasilia, MA (2013) Villareal, BA Honors (2014) Horn, PhD (2015) Novotny, PhD (2015) Peniche May, PhD (2016) Green, PhD (2016) Delance, PhD (2016) Zanotto, MA (2017) Lopez Johnson, MA (2019) Watkins, MA (2019) Porter, MA (2020)
University of Montana-BVAR	2011–2019	Cahal Pech (site core)	Jaime Awe John Douglas Linda Brown	BVAR 2011 Field Season BVAR 2012 Field Season BVAR 2013 Field Season BVAR 2014 Field Season BVAR 2015 Field Season BVAR 2016 Field Season BVAR 2017 Field Season BVAR 2018 Field Season BVAR 2019 Field Season Johannesen, MA (2018)
	2012–2019	Cahal Pech (periphery)	Jaime Awe Claire Ebert Wendy Dorenbush Steve Fox Samuel Hemsley Julie Hoggarth Keith Solmo	BVAR 2012 Field Season BVAR 2013 Field Season BVAR 2014 Field Season BVAR 2015 Field Season BVAR 2016 Field Season BVAR 2018 Field Season Ebert, PhD (2017) Fox, MA (2018) Dorenbush, MA (2018) Hemsley, MA (2019) Solmo, MA (2018)
	2013–current	Baking Pot (site core)	Jaime Awe Julie Hoggarth Sarah Bednar Jorge Can Britt Davis Rosie Fitzmaurice Christophe Helmke Amber Lopez Johnson Sydney Lonaker Niyo Moraza-Keeswood Gabriela Saldaña Kelsey Sullivan Tia Watkins Christina Zweig	BVAR 2013 Field Season BVAR 2014 Field Season BVAR 2015 Field Season BVAR 2016 Field Season BVAR 2017 Field Season BVAR 2018 Field Season BVAR 2019 Field Season Davis, MA (2018) Watkins, MA (2019) Tappan, MA (2020)

Table 1. Cont.

Sub-Project Name/Acronym	Year(s)	Sites Investigated	Directors and Senior Staff	Research Report/Publication
US Ambassador's Fund for Cultural Preservation—Benque	2014	Benque site	Jaime Awe Jorge Can	
	2013	Burns Avenue salvage archaeology	Jaime Awe Sylvia Batty Antonio Beardall Jorge Can Gonzalo Pleitez Josue Ramos	
Xunantunich Archaeology and Conservation Project (XACP)	2015–current	Xunantunich (site core)	Jaime Awe Doug Tilden Aimee Alvarado Tucker Austin Christina Burke Rosie Bongiovanni Jorge Can Claire Ebert Cassandra Feely Rosie Fitzmaurice Kirsten Green Christophe Helmke Victoria Izzo Ashley McKeown Emma Messenger Catharina Santasia Diane Slocum Kelsey Sullivan Tia Watkins Hannah Zanotto	BVAR 2015 Field Season BVAR 2016 Field Season BVAR 2017 Field Season BVAR 2018 Field Season BVAR 2019 Field Season Sullivan, MA (2017) Fitzmaurice, MA (2018) Stricklin, MA (2019) Feely, MA (2019) Austin, MA (2019) Alvarado, MA (2019)
Other regional research	2015–current	Lower Barton Creek Regional surveys	Jaime Awe Jeffrey Burns G. Van Kollias Keith Solmo	Kollias, MA (2016) Solmo, MA (2018) Burns, MA (2018)

Exploratory work at the site of Baking Pot was initiated in 1992 after the site came under threat by modern cultivation, with research initially focusing on the Bedran settlement group to the west of the monumental epicenter [14]. The following two seasons were split between the peripheral settlement areas at Cahal Pech and Baking Pot [15–17], with an increasing focus on the study of middle level settlements and sacbe (causeway) termini complexes at both sites. The BVAR Project's research focus shifted completely to Baking Pot beginning in 1995 [18] and continuing into 1996 [19], with excavations in the northern monumental group [20] and the Atalaya settlement group [21]. Aimers' [22] research in Group A detailed the slow processes of political disintegration at the site, with evidence for Postclassic activity in Plaza A. Excavations at Pacbitun focused on Middle Formative occupation of the site [23], in an effort to continue investigations by the Preclassic Maya Project (directed by Healy and Awe). In addition, investigatory reconnaissance and survey was initiated at Actun Tunichil Muknal and other nearby caves in the Upper Roaring Creek Valley.

Following the exploratory 1996 season, BVAR initiated the Western Belize Regional Cave Project (WBRCP), a sub-branch of the BVAR project that lasted for several seasons (1997–2003). While the research focus of the project shifted to survey and excavation of surface and cave sites in the Roaring Creek, Barton Creek, and Macal River Valleys, research in the Upper Belize Valley proper continued as well. To launch the WBRCP, Awe established a project camp outside Actun Tunichil Muknal (ATM), mapping and conducting excavations for that location over the course of several years [24,25]. The ATM investigations were integral in later efforts to establish that site as an archaeological reserve and as a

major tourist destination. The WBRCP was also the first wide-reaching and regional cave project in the Maya lowlands, with research focused at several cave sites across Western Belize, including Actun Uayazaba Kab [26], Actun Yaxteel Ahau [27], Actun Chapat [28–30], Actun Nak Beh [31], Barton Creek Cave [32], Actun Halal Rockshelter [33], Actun Oxyehub in the Sibun Valley [34], Cueva Migdalia [35], Actun Chuplal [36], and Chechem Ha cave [37]. This research showed that the ancient Maya had a long history of ritual use of caves throughout Western Belize, and this ritual intensified alongside political and environmental instability in the Terminal Classic period (AD 750–900/1000) [38,39]. In conjunction with the WBRCP, Helmke also conducted investigations at Pook’s Hill, detailing the long history of occupation at the *plazuela* group [40,41]. The research at Pook’s Hill was subsequently complemented with a conservation project that aimed to expand tourism opportunities in the Roaring Creek Valley.

Research at Baking Pot resumed at the turn of the twenty-first century, with an expansion of the settlement survey program that was designed to map the entirety of the site’s eastern periphery [42,43]. Simultaneously, excavations at the Yaxtun Group were initiated and soon identified an important Postclassic component [44], offering additional evidence that Baking Pot had an occupation in the Postclassic long-past its Classic period heyday. Over the next four years, Audet and Awe’s research in the site epicenter would continue, discovering elaborate royal tombs and architecture at several locations in Group A [45–47], the palace complex of Group B [48], evidence of ritual activity and scalping in an Early Classic cache at the causeway termini structure [49,50], and excavating house mounds in the central settlement [51–54]. Between 1999 and 2004, BVAR recorded important information about the history of Baking Pot, suggesting that it was an important center in the Belize Valley with political contacts that extended into the Petén, including Naranjo and Holmul [55].

Between 2000 and 2004, Awe became the director of the Tourism Development Project (TDP), operating jointly through the Belize government and the BVAR Project, the primary focus of which was the excavation, conservation, and tourism development of several major archaeological sites across Belize. To execute this very ambitious conservation program within a relatively short four-year lifespan of the project, Awe employed several BVAR archaeologists to serve as onsite supervisors. At Caracol, extensive horizontal excavations [56–58] focused on the monumental architecture of the site core, including the entire southern façade of Caana (Figure 2a,b), the adjacent Barrio Group, several structures in Plaza B, including the Group B ballcourt, the E-Group and other associated structures in Plaza A, the south acropolis, the Raleigh Group, and the Group A ballcourt. These investigations were important because not only did they aesthetically improve the site for tourism, but key discoveries added to the site’s history. Among the most significant discoveries were the inscribed Ballcourt B markers, the Early Classic Stela 20, the stucco masks flanking the central stairway of Structure B5,⁹ and the Witz mask and accompanying hieroglyphic text on the eastern flank of Structure B19.



Figure 2. Photos from the conservation of Caana, Caracol: (a) At the beginning of conservation;

(b) After conservation was completed. Photos by J.L. Awe and Diane Chase.

Figure 2. Photos from the conservation of Caana, Caracol: (a) At the beginning of conservation; (b)

After conservation was completed. Photos by J.J. Awe and Diane Chase.

The TDP also made considerable improvements at Cahal Pech, Xunantunich, Altun Ha, Lamanai, and Lubaantun. At Cahal Pech, the project excavated and conserved several of the monumental buildings in the site’s palace complex, as well as buildings in Plazas B, C, and F. In addition, the site at Cahal Pech included the construction of a new site entrance and Terminal

Heritage Figure 2. Photos from the conservation of Caana, Caracol: (a) At the beginning of conservation; (b) After conservation was completed. Photos by J.J. Awe and Diane Chase.

The TDP also made considerable improvements at Cahal Pech, Xunantunich, Altun Ha, Lamanai, and Lubaantun. At Cahal Pech, the project excavated and conserved several of the monumental buildings in the site's palace complex, as well as buildings in Plazas B, C, and F. Important discoveries at Cahal Pech included several peri-abandonment deposits and Terminal Classic burials across the site core [59]. Conservation efforts at Xunantunich (Figure 3a,b) focused on Strs. A-6 (the Castillo), Classic burials across the site core [59]. Conservation efforts at Xunantunich (Figure 3a,b) focused on Strs. A-6, A11 and A13 in the Plaza AIII palace complex, and on Strs. A4, A14, and A15, as well as Strs. A-6 (the Castillo), on Strs. A11 and A13 in the Plaza AIII palace complex, and on Strs. A4, A14, Ballcourt 1 [55] (pg. 34). Besides conserving the spectacular east frieze on the Castillo, the project also covered this fragile monument with a fiberglass replica. These efforts also discovered the first recorded elite crypt in the site core, Panel 2, and ballcourt rings in Ballcourt 1. Panel 2 is particularly important because its hieroglyphic text likely records the original name of the site [60]. At Altun Ha and Lamanai, Panel 2 is particularly important because its hieroglyphic text likely records the original name of the site [60]. At Altun Ha and Lamanai, the TDP finished excavations and then conserved all the major architecture that had been previously exposed in the epicenters of these sites by David Pendergast. At Lubaantun, in contrast, the TDP's architecture that had been previously exposed in the epicenters of these sites by David Pendergast. At Lubaantun, in contrast, the TDP's efforts were directed towards the conservation of several buildings and monuments that had been damaged during Hurricane Iris in 2001.



(a)



(b)

Figure 3. Photos from the conservation of the Castillo (Str. A6) at Xunantunich: (a) Prior to TDP conservation efforts (b) After TDP conservation efforts were completed. Photos by J.J. Awe.

In June of 2003, BVAR was contracted by the government of Belize to perform archaeological mitigation in the Upper Macal and Raspaculo river valleys in Western Belize in response to the construction of the Chalillo Dam. Over the course of two years, an intensive salvage program was focused on settlement survey, plus the testing and large-scale excavation of structures to gain information about the cultural history of the region [61]. This research resulted in the identification of high densities of isolated structures, *plazuelas*, and multiple plaza groups. Major centers with monumental architecture and elite burials were also recorded. Of particular importance, the project demonstrated that this seemingly uninhabited region had been home to considerable Late Classic Maya populations. Although some of the sites were flooded with the construction of the dam, the preservation of the information from the salvage project ensures that their legacy will be maintained within the cultural heritage of Belize. Research from 2005 to 2008 was split between multiple sites: Pook's Hill [62], Caves Branch Rock Shelter [63–66], Cahal Pech [67], and Baking Pot [68–71]. Regional studies were pivotal in providing information about the landscape of the Roaring Creek Valley, with research at Pook's Hill showing both residential and ceremonial activity at the site during the Late Classic period. New explorations in the Caves Branch region offered previously unknown information about its regional trajectory. These studies found evidence of extensive mortuary activity at the site from the Middle Preclassic through Postclassic periods, subsequently leading to the initiation of a new independent project, the Central Belize Archaeological Survey (CBAS) Project under the direction of

Gabe Wrobel, Shawn Morton and Christopher Andres. Concurrent excavations at Cahal Pech revealed an impressive Terminal Classic tomb that likely housed one of the last known rulers of the site [72].

During the following period between 2008 and 2013, BVAR research was refocused at Baking Pot, with Hoggarth and colleagues' [70,71] research extending the settlement survey to the west and south to connect to the Cahal Pech survey, and eastward to connect to the Spanish Lookout and Barton Ramie survey. At the same time, Hoggarth also conducted household excavations in Settlement Cluster C [70–82] in an effort to explore the strategies of commoner households to adapt to the processes of sociopolitical collapse of institutionalized rulership at the end of the Classic period [82]. This research identified that commoner households increasingly engaged in long-distance exchange, while the higher status groups focused on community integration, prior to the site's abandonment. Helmke's excavations of Group B at the site remapped the site core [68] and identified the extensive history of construction at the eastern shrine (Str. B1), including the identification of an elaborate Late Classic tomb. This structure had been documented in the 1960s by William and Mary Bullard [83].

In 2010, BVAR archaeologists were informed of a new major center near the village of Unitedville and this led to the start of investigations at Lower Dover under the direction of Rafael Guerra and Awe [84–90]. Interestingly, continuing research at the site has demonstrated that Lower Dover arose later than its contemporaries (e.g., Cahal Pech and Baking Pot), with monumental construction in the site epicenter constrained to the Late Classic [86]. Survey of the settlement around Lower Dover was initiated in 2014 [89,91] recording a distinct settlement clusters to the south of the site. Walden's more recent research [92–94] has expanded the scope of this survey to link it to Willey and colleagues' [95] Barton Ramie, Floral Park, and Spanish Lookout surveys, as well as previous Baking Pot surveys [71,73]. Furthermore, Walden and colleagues' excavations in the Tutu Uitz Na (SG1) group and other households in the Lower Dover settlement revealed that some peripheral communities existed prior to the establishment of the Lower Dover site core [96], with intermediate elites serving important roles in the development of power at the site. Continued excavations in the palace complex at Lower Dover by Watkins and colleagues [97] explored the development, function, and regional role of Courtyard 2, finding little evidence for exotic materials while also recording a peri-abandonment deposit that terminated the use of the courtyard. Throughout the Lower Dover research, BVAR researchers worked closely with the Friends of Lower Dover and the Lower Dover Field Station to conserve Courtyard 4 (Figure 4a,b), the eastern structure of the ballcourt, and structures in Plaza A, B, and G, to conserve the archaeological site and natural resources for tourism. Since the location was already developed for ecological tours, with trails identifying important local and economic species



Figure 4. Photos from the conservation of Courtyard 4 at Lower Dover: (a) Prior to conservation efforts (b) After conservation efforts were completed. Photos by R.A. Guerra.

A refocus on documenting the region's settlement history came in 2012 with a return to research in Cahal Pech's settlement area beginning in 2012. Dorenbusch's [98] expansion of the settlement survey at Cahal Pech revealed extensive settlement clustering near the confluence of the Macal and Mopan Rivers. Eber's excavations at the large Tzutziy K'in group in the western periphery of the site documented the Preclassic to Terminal Classic construction history associated with the rise of Cahal Pech's elite [99,100]. Additionally, table 11 in the following document details the archaeological history of Cahal Pech's elite [101].

A refocus on documenting the region's settlement history came in 2012 with a return to research in Cahal Pech's settlement area beginning in 2012. Dorenbusch's [98] expansion of the settlement survey at Cahal Pech revealed extensive settlement clustering near the confluence of the Macal and Mopan Rivers. Ebert's excavations at the large Tzutziy K'in group in the western periphery of the site documented the Preclassic to Terminal Classic construction history associated with the rise of social inequality [99–102]. Additionally, stable isotope and radiocarbon data on burials from Cahal Pech demonstrated that the site's Terminal Classic residents were more vulnerable to the effects of drought than their Preclassic counterparts, ultimately impacting the disintegration of the polity around AD 850 [103]. At the same time, Fox's excavations of peri-abandonment deposits at the Zopilote group to the south of the site core helped to reconstruct the final ritual activities associated with the abandonment of Cahal Pech [104,105].

The acquisition of lidar (light detection and ranging) remote sensing data from across the Belize Valley (as part of the West-Central Belize LiDAR Survey, [106]) also served as an important threshold in this research, allowing areas with dense vegetation to be assessed and new settlements and constructed features to be identified. This resulted in a full coverage classification of over 125 km² that also integrated previous survey work [70,82]. Lidar survey allowed for the detection of two previously undocumented major centers in the Upper Belize River Valley, Ek Tzul to the south of Baking Pot, and Lower Barton Creek to the south of Lower Dover [107–109]. Analysis of lidar data near the Bedran group in Baking Pot's western periphery identified over 20 linear km of ditched fields, revealing the system to be much larger than previously understood [108]. In addition, statistical analysis of lidar and excavation data helped to identify at least six tiers in the settlement hierarchy across the Belize Valley sub-region [96], providing a framework that can be replicated and applied to other parts of the Maya lowlands.

The BVAR Project's efforts to engage with the public and to conserve archaeological sites for tourism were enhanced when the project began a collaboration with the American Foreign Academic Research (AFAR) program in 2010 [110], and with the Tilden Family Foundation shortly thereafter. The AFAR program offers educational opportunities for high school students from the United States and Belize to conduct archaeological research at Cahal Pech. Each summer BVAR-AFAR has excavated numerous areas across the site core at Cahal Pech and conserved those areas for tourism, while simultaneously training more than 200 high school students in archaeological field methods since 2010. The early efforts focused on preserving the area adjacent to Plaza C and the associated ballcourt through a site preservation grant funded by the Archaeological Institute of America. The strong focus on site conservation continued through the support of the Tilden Family Foundation, with subsequent excavations at Ballcourt 1 [111], the eastern triadic group [112–117] (Figure 5a,b), Strs. B4, B6 and B7 [118], Plaza B [119,120], and Strs. G1 and G2 [121–123] to further enhance the site for tourism. Douglas and Brown's work in Plaza H [124–127] has sought to better elucidate the timing of processes associated with Cahal Pech's Terminal Classic occupation. Furthermore, excavations in Plaza B led by Ebert have identified a large monumental structure dating to the Preclassic period that likely represents the western radial structure of a Middle Preclassic E-Group at the site, associated with several Middle Preclassic ceramic caches [128,129].

A major theme in BVAR research that has developed since 2013 deals with documenting the processes of abandonment of sites across the Belize Valley between AD 750 and 900. Awe [60,72] had been documenting peri-abandonment (i.e., terminal) deposits across sites in Belize for over two decades. These deposits, located in corners of plazas/courtyards or flanking central stairways, often sat atop a matrix layer, which suggested that some time had elapsed between the end of plaza maintenance and deposition. To better understand these peri-abandonment deposits, the BVAR Project began strategic excavations to locate similar deposits at various sites across the Belize Valley and to compare them with those extensively documented at Cahal Pech. In 2013, Hoggarth began directing research in Group B focused on identifying such deposits as well as developing a high-precision AMS ¹⁴C chronology of the site's decline, to complement previous research on Baking Pot's abandonment by

Aimers [22] in the northern Group A. Multiple deposits were identified in Group B [130–135] and the high-precision radiocarbon chronology of Baking Pot deposits identified that they were formed through multiple depositional events spread across the eighth and ninth century, suggesting a slow enhance the site for tourism. Douglas and Brown's work in Plaza HT [124–127] has sought to better and protracted process of abandonment and decline [131]. Davis [130,132] analysis of materials from elucidate the timing of processes associated with Cahal Pech's Terminal Classic occupation. those deposits presented important information on the specific activities that formed the features, Furthermore, excavations in Plaza B led by Ebert have identified a large, monumental structure suggesting that food/water storage, with iconography associated with fertility, were integral to the dating to the Preclassic period that likely represents the western radial structure of a Middle final rituals associated with the formation of the deposits. Preclassic E-Group at the site, associated with several Middle Preclassic ceramic caches [128,129].



Figure 5. Photos from the conservation of the eastern triadic shrine at Cahal Pech: (a) Prior to conservation efforts (b) After conservation efforts were completed. Photos by J.J. Awe.

The regional comparison of peri-abandonment deposits across the Belize Valley [60,136–141]. A major theme in BVAR research that has developed since 2013 deals with documenting the presented important information showing similar patterns of deposition and materials at Cahal Pech, processes of abandonment of sites across the Belize Valley between AD 750 and 900. Awe [60,72] had Baking Pot, Xunantunich, Lower Dover, and Pook’s Hill [60], with some discontinuities in the filming been documenting peri-abandonment (i.e., terminal) deposits across sites in Belize for over two of their deposition [139]. While Cahal Pech’s deposits were shallow and appear to have been deposited decades, These deposits, located in corners of plazas/courtyards or flanking central stairways, often over a short period of time in the eighth century [137], deposits at Baking Pot were large, stratified, sat atop a matrix layer, which suggested that some time had elapsed between the end of plaza and persisted into the mid-to-late ninth century [139]. Deposits at Lower Dover and Xunantunich maintenance and deposition. To better understand these peri-abandonment deposits, the BVAR appear to be more akin to the depositional scenarios at Cahal Pech, while those at Pook’s Hill share Project began strategic excavations to locate similar deposits at various sites across the Belize Valley more similarities with the dense and stratified deposits at Baking Pot. This same era of the BVAR and to compare them with those extensively documented at Cahal Pech. In 2013, Hoggarth began Project saw the conservation of several areas at Baking Pot, including a well-preserved sweatbath in directing research in Group B focused on identifying such deposits as well as developing a high-the royal palace complex, and several structures associated with Plaza B of Group B (Figure 6).

In 2014, funding from the US Ambassador's Fund for Cultural Preservation was also awarded to Awe to excavate and conserve the Benque Site, located in the modern town of Benque Viejo, from further destruction and for tourism purposes. Horizontal excavations completely stripped the central buildings at the site, revealing that the small center dates primarily to the Late Classic period, and that it maintained close affiliation with Xunantunich. Since its preservation, the site has become a regular destination for members of the local community, including children from Benque Viejo's elementary and high schools. Additionally, the site offers tourists departing through the country's western border one last picture of the ancient Maya of Belize. BVAR's research and conservation efforts, with support from the Tilden Family Foundation, initiated the Xunantunich Archaeology and Conservation Project (XACP) in 2015 [142,143]. A major focus of XACP, which operates under the joint auspices of the BVAR Project and the Belize Institute of Archaeology, is to continue the TDP's conservation and tourism development of the Xunantunich site core [144]. During the summers of 2015 and 2016, Awe directed BVAR excavations at the triadic group (Strs. A2 and A3), Str. A20 atop the Castillo, and Str. A8. The triadic shrine excavations [143] suggested that the group was largely constructed in a single construction episode during the Late-Terminal Classic. Str A20 atop the Castillo was re-opened and conserved to highlight its unique architecture featuring a colonnaded shrine that is reminiscent of Terminal Classic architecture of the northern lowlands [144]. Continuing research over the following several seasons saw the excavation and conservation of Strs. A7, A9, A13, A28, and Group B [145–149]. In 2016, Str. A9 was the site of important new discoveries at Xunantunich, including a royal tomb and two hieroglyphic panels that had once been part of a hieroglyphic stairway at Caracol [142,148,149]. With the defeat of Caracol by Naranjo in AD 670, panels from the stair were dismantled and transported to Naranjo and its allies (Ucanal and Xunantunich) [150–152]. The text contains important dynastic details for the central lowlands, including the death date of rulers from Caracol and the Kanu'l (Snake) dynasty, and the first epigraphic confirmation of conflict involved in the transfer of power from Dzibanche to Calakmul as the seat of power for the Snake Dynasty [142,148–152]. Furthermore, the single phase of construction of Str. A9 was likely to house the tomb of a female ruler or elite that dates around the same time as the Naranjo defeat of Caracol in the mid-seventh century. Additional excavation and conservation efforts over the past several years have focused on the north palace complex [153], on Ballcourts 1 and 2 [154], Terminal Classic architecture in Plaza A1 [155], and at Group B [147,156].

At the time of writing this manuscript, the coronavirus pandemic has disrupted what would have been the 33rd consecutive field season by BVAR. Despite the new challenges that this will present, our major concern is for the well-being of the people of Belize. We also recognize that this brief hiatus in excavation is but a brief pause in our project's long-term plans to continue the conservation of sites across the Belize Valley, to seek out and train Belizean students in professional archaeology, to educate the next generation of Maya archaeologists from around the world, and to create training/educational materials for tour guides and artisans through the dissemination of research. In the following sections, we will elaborate on the lessons learned through site conservation, the project's educational and training efforts, as well as its heritage and outreach initiatives. These tie in closely with the history of research across the project's 32 years and have guided the future directions of the project.

3. Conserving the Past for the Future: Lessons Learned During the Past K'atun and a Half

The conservation of ancient and fragile monuments is never an easy task. This is particularly true in developing countries where these challenges are compounded by the unavailability of conservation materials and by the lack of personnel trained in conservation protocols. This was certainly the case in Belize in the 1980s, and it continued to be an issue in the 1990s and early 2000s. The latter situation is particularly exemplified by early conservation efforts at Cerros, Xunantunich, Lamanai, and Altun Ha.

Following David Freidel's discovery of the stucco masks at Cerros in the late 1970s, both Freidel and the Belize Department of Archaeology were in a quandary concerning how to preserve the fragile monuments. Despite the negative impacts of the reburial of masks at Uaxactun [157], in the end, both parties decided that it was likely best to rebury the Cerros masks with the hope that this would keep them preserved and that they could be conserved in the future. In the case of Xunantunich, Lamanai, and Altun Ha, archaeologists and conservators had to contend with three major challenges. The first of these challenges involved previous conservation efforts at these sites. In the 1960s and 1970s, for example, cement mixed with sand had been used to mortar limestone blocks together. During the ensuing 20–30 years, the acidity of the cement and sand accelerated the dissolution of the limestone blocks, thus compromising the stability of the prehistoric architecture. This conservation approach was discontinued in the 1990s when we began to employ mortar prepared from water mixed with *cal* (lime powder) and *sascab* (marl) and which more closely approximated the mortar used by the ancient Maya.

Another issue that greatly affected our conservation efforts at Xunantunich was the reuse of cut stones from collapsed buildings. Limestone from outcrops around Xunantunich is of relatively low quality, and limestone blocks from collapsed architecture often disintegrate due to the combined forces of time and the natural elements. For suitable replacements, we had to locate an ancient quarry and then mine it anew for fresh blocks. This process is slow, physically taxing, and time consuming, especially since freshly cut blocks need to be left exposed to the elements for some time so that they can begin to harden. After several weeks of exposure, the cut stones are stable and solid enough to replace those destroyed in collapsed buildings. While we were able to apply this approach to our conservation work during the four-year-long TDP, it quickly became apparent that it would be inefficient in projects with limited funding and time constraints. To address this concern, in 2002 Awe decided to experiment with the production of blocks made from the same *cal* and *sascab* mix that was used to make mortar. This approach was very successful because blocks could be quickly produced and custom-made to specific sizes, and they were very durable.

The third and most challenging conservation effort was what to do with fragile stucco masks following their discovery and exposure. Faced with this challenge after their excavation of the west frieze at Xunantunich, directors of the Xunantunich Archaeological Project [158] decided to hire a conservator from Guatemala to come and preserve the monument. This effort was quite successful but extremely costly as materials to produce a fiberglass replica had to be imported from abroad and the conservator's financial compensation was considerable. In 2001, while executing the TDP's conservation efforts at Xunantunich, we were faced with a similar but even more daunting task, that of conserving the considerably larger stucco frieze on the eastern summit of the Castillo. Years of direct exposure to the elements had left the east frieze in very poor condition and in danger of being irretrievably lost (Figure 7a,b). To save the project money, Awe hired one of the Guatemalan conservators who had worked on the west frieze, to come and assist the TDP in its efforts to preserve the frieze. One of the conditions of the conservator's contract was that he would train several Belizeans in the art of reproducing fiber glass replicas of stucco masks. This was agreed on and following the closure of the TDP, Awe permanently hired the Belizean apprentices to work for the Belize Institute of Archaeology. These newly trained Belizean conservators were subsequently responsible for conserving the large stucco masks at Caracol, Cerros, and Lamanai, for producing fiberglass replicas of the masks at the three sites, as well as the recently discovered hieroglyphic panels at Xunantunich. Equally important to those conservation successes is that we were able to develop Belize's capacity to protect its own cultural heritage and to no longer depend on costly foreign professionals to do this.

responsible for conserving the large stucco masks at Caracol, Cerros, and Lamanai, for producing fiberglass replicas of the masks at the three sites, as well as the recently discovered hieroglyphic panels at Xunantunich. Equally important to those conservation successes is that we were able to ~~highlight~~ Belize's capacity to protect its own cultural heritage and to no longer depend on costly foreign professionals to do this.



Figure 7 Photos from the conservation of the eastern frieze on the Castillo (Str. A6) at Xunantunich: (a) Prior to conservation efforts, (b) after conservation efforts were completed. Photos by J.J. Awe.

4. Education and Training Lessons

Since its inception in 1988, the BVAR Project continues to be the largest and one of the only archaeological projects that has been directed, and co-directed, by Belizean archaeologists. We have also produced the most Masters theses and doctoral dissertations by Belizean archaeologists in the country, with two Belizean PhDs (Awe [6] and Moore [159]), one MA [160] and soon-to-be PhD (Guerra), and one MA in progress (Beardall). In addition, the project has actively offered research opportunities to interested Belizeans ranging from high school to college students, and has also trained several archaeologists who are employed by the Belize Institute of Archaeology (IA) and the Institute for Social and Cultural Research (ISCR). Besides training Belizeans, the BVAR Project has also mentored undergraduate and graduate students from around the world, producing over 60 Honors and Masters Theses, and Dissertations, an accomplishment that reflects the wide reach in the project's Honors and Masters Theses, and Dissertations, an accomplishment that reflects the wide reach in the training of professional archaeologists within the field of archaeology. BVAR has also developed strong connections with local Maya communities, including the village of San Jose Succotz and San Antonio, through Programs aimed at education and training for tour guides and the revitalization of cottage industries.

The BVAR Project field school annually offers 2 month-long field sessions in the summer, providing undergraduate and graduate students, and other interested members of the public, the opportunity to be trained in archaeological field and laboratory methods and the archaeology of the ancient Maya. The field school has operated for 32 years, training more than a thousand students since 1988. Running such a large field school has had both challenges as well as successes. We have taken pride in training numerous current PIs running projects in Belize, and up-and-coming graduate students currently on taken pride in training numerous current PIs running projects in Belize, and up-and-coming graduate archaeological projects across the Maya area, as well as archaeologists working in other parts of the world. The project has always had a strong focus on training Belizean students, and has established scholarship programs for Belizean students interested in archaeology in order to fully waive field school fees, and in cases where students might not be local to San Ignacio, to house them with the fully waive field school fees, and in cases where students might not be local to San Ignacio, to house them with the other international field school students.

In addition to this program, the next generation of Belizean archaeologists have started to focus on offering intensive training for other Belizeans during the BVAR sessions. For example, BVAR has had long ties with Galen University where Awe joined the faculty and began the Anthropology Program in 2005. Over the past 15 years, other BVAR archaeologists have offered summer courses at Galen and their new Dean, Sherry Gibbs, was a graduate student of BVAR's cave project in the Roaring Creek Valley. More recently, Antonio Beardall has hosted numerous Belizean students from Galen at Cahal Pech during the annual BVAR field school. This offers an important opportunity for Belizean students

not only to gain valuable experience in archaeology, but also to be instructed by Belizean archaeologists who serve as role models and mentors in navigating ways that those students might become future archaeologists themselves. Beardall believes that having local youth participate on an archaeological project is a great way to strengthen their own appreciation of cultural heritage as well as strengthening their Belizean cultural identity.

Perhaps it is important to note that unlike the US where many archaeological sites have specific cultural affiliations, Belize promotes multi-ethnic, national, stewardship of its archaeological past. Unlike the U.S. which has several different sets of regulations for the management of cultural resources on private, state, and federal land, Belize also practices a unitary system of heritage management where legal ownership of all cultural resources, wherever they are situated, is vested in the government and people of Belize [161]. This unitary system of ownership and management encourages and promotes the concept that no single ethnic group solely owns any part or parcel of the nation's cultural resources, and that all Belizeans, regardless of their ethnicity, are responsible for the protection and preservation of all the country's heritage.

Belize's 'multi-ethnic stewardship' of its heritage is a functional model that has worked and will continue to work well, particularly in parts of the country where communities located around ancient Maya sites are not of indigenous Maya background. The ancient site of Altun Ha, which is encircled by the Creole communities of Lucky Strike and Rockstone Pond, provides one of several good examples of this approach. At Altun Ha, for example, most of the park rangers, and all part-time employees hired to protect and manage the site are members of the two Creole communities that encircle the site. Yet another excellent example of the success of this approach is provided by the site of Lamanai in Northern Belize. The Lamanai archaeological park contains three distinct zones; the Maya zone which includes prehistoric monumental palaces and pyramids, the Spanish zone with the remains of two *visita* churches, and the British zone that contains a colonial period sugar mill. Most of the park managers and staff at Lamanai include ethnic Mestizos from a refugee village (Indian Church) originally populated by immigrants from Guatemala and El Salvador. This approach to heritage management has fostered, and continues to foster, a strong sense of pride, nationalism, and identity among all Belizeans, regardless of their origin or ethnicity. Active Belizean participation in research and heritage management is also a major step towards decolonizing archaeological theory and attitudes in Belize and promotes a passion for learning about history, both before and after European contact. Beardall's MA research, which is examining the impacts and significance of public education and outreach, and how Belizeans perceive foreign projects, will help to modify future directions of archaeological research by providing foreign archaeologists with ideas on how to incorporate Belizean interests in their project goals. Guerra's MA research [160] examined how effective Belize has been at controlling looting and the movement of illicit artifacts. The research found that data is lacking for understanding these processes in Belize, and Guerra established guidelines to push the country to educate citizens of Belize on the value of protecting their diverse cultural heritage.

The project also regularly reaches out to tour guides across the region to offer opportunities for guides to visit sites during excavations and to participate in our investigations. These opportunities allow guides to provide more nuanced and informed tours to visitors of Belize, including personal accounts by the guides themselves. The relationships that have been forged over the years between the BVAR Project and local tour guides originates in Awe's contribution to the writing of the national tour guide training manual, in his participation in the Belize tour guide certification program, and his coordination of the first official cave guiding course in the country. Having such close involvement in the establishment of these programs offers the project the ability to identify the specific types of information that may be out of date from the training materials themselves. Tour guides are often of multi-ethnic descent, although several former (and current) excavators with the project from the village of San Jose Succotz identify as being of Maya descent. Several guides from the community have utilized the knowledge and skills in archaeological research that they have learned with the BVAR Project to become successful tour guide operators in the region.

As a result of the increasing amount of archaeological information produced since the tour guide manuals were written, in 2018, the project began to create one-page research summaries reporting the results of graduate research and other published BVAR studies. The summaries are aimed at offering quick research summaries for tour guides and for directing them to the full manuscripts that are available online [162]. Lessons have been learned over the past several years through the creation of these materials. First and foremost, academic archaeologists are rarely trained in communicating the results of their findings to local communities. Making these materials brief and visually appealing, with images and short bullet points that are written at the high-school educational level, have been some of the improvements that the project has been working on. Some of the lessons learned from BVAR's work with tour guides lies in the project's ability to communicate effectively with them, particularly through their participation in our excavation and conservation efforts during the summer. For example, the project regularly offers bi-weekly field school lectures, offering a wide variety of topics including the chronological periods of the Maya, as well as topical lectures on settlement patterns, osteological analysis, and other themes. While the lectures have always been open to the public and some tour guides attend, we have realized that a greater effort towards advertising these events often result in greater attendance from guides, as well as other interested members of the public. We incorporated the latter approach in 2019 and plan to continue more dedicated efforts towards advertising the lectures through social media and during site visits. In particular, we hope to target tour guides, artisan groups, as well as students from local schools and universities.

Additional efforts towards the education and training of tour guides continues with regular lectures to the Cayo, San Jose Succotz, and Belmopan Tour Guide Associations during the winter and summer months. As part of these efforts, we have increasingly worked to make sure that guides across Western Belize are aware of research summaries, recent publications, and other educational materials that are available on the BVAR Project website. Guerra's assumption of the role of president of the Cayo Tour Guide Association offers great new avenues to forge these collaborations, particularly because as a local liaison for the tour guides this offers a unique opportunity for us to expand our project's educational and training programs. He has started the Belize Tour Guiding Network, which will provide educational opportunities to guides during the COVID-19 pandemic and beyond, with the inaugural lectures focusing on training guides in the basics of archaeological method and theory. He sees this role as an opportunity to update the bylaws to include additional officers for the organization who will be responsible for managing opportunities for archaeologists and tour guides to connect. While the BVAR Project has contributed to the training of students and tour guides across the three decades of its history, the lessons learned through the continual revision of methods and materials will allow us to extend our outreach programs to other communities and stakeholders in the future.

5. Heritage and Outreach Lessons

BVAR's three-decade history of heritage and outreach initiatives (Table 2) has allowed us to forge important relationships with tour guides, artisan groups, schools, local communities, indigenous groups, and the Belize Institute of Archaeology. Mutually beneficial collaborations with all these stakeholders has enabled us to make significant strides in the preservation of Belize's archaeological resources while simultaneously disseminating the results of our project research and including local interests in the direction of heritage management in Western Belize. In 1987, some of these early relationships were formed in the local indigenous community of San Antonio, when Awe procured local slate and identified Maya art that could be used to produce slate carvings for sale to tourists. BVAR's relationship with modern artisan groups continues today and is best reflected by a recent collaborative project between ceramic artist Jeremiah Donovan of the State University of New York at Cortland, and Awe. The focus of this project, which is titled the 'Future of the Past: Revitalizing Ancient Maya Ceramic Traditions in a Modern Maya Community Project' is to train members of the San Antonio Women's Cooperative (SAWC) to produce good quality ceramics for sale in the tourist industry. To encourage replication of ancient Maya masterpieces, Awe provides the local potters

with images of ceramics discovered at neighboring sites and the potters then replicate these vessels under the guidance of Donovan. This new project expanded Awe's earlier efforts with the Garcia Sisters slate carving studio in San Antonio village. A highlight of the ceramic revitalization and replication project came in the form of a grant from the National Endowment for the Arts in 2016 which, in addition to purchasing a modern kiln for the cooperative, paid for them to travel to New York where their pottery was exhibited in the Dowd Gallery at SUNY Cortland [163–165]. As technologies change, we can expect that the relationships between archaeological projects and local communities will change with them. Hoggarth and Awe are currently working on developing an expansion of current collaborations with artisan groups, creating 3D models of ceramic vessels that will be able to be utilized by both scholars and artisan groups. Future workshops training artisans from the nearby Maya communities will be held to aid in the use of archaeological finds in the production of modern crafts, as well as to disseminate images of their creations. Interested parties can follow the project at www.bvar.org/ceramics-in-3D. Similarly, Watkins is using photogrammetry and digital documentation of architecture to create an interactive record of excavations and preserve evidence of graffiti, which is very fragile. This project can be followed at www.bvar.org/architecture-in-3D. Efforts to preserve cultural heritage through the dissemination of the most up-to-date archaeological findings have also had a long history in the BVAR Project. As we noted previously, in 1988 Awe received a grant from the Canadian Commission for UNESCO and the Canadian International Development Agency to launch a joint archaeology and heritage management project at Cahal Pech. As part of this early effort in heritage management, Awe wrote the first guidebook for Cahal Pech and delivered these materials to the local tour guide association. At that point, Cahal Pech was not yet designated as an archaeological reserve, so the project surveyed the site and established the official boundaries of the national reserve in 1993. The BVAR-WBRCP research at Actun Tunichil Muknal and Barton Creek Cave were pivotal in establishing those locations as national reserves, now visited by several thousand visitors to Belize annually and supporting the large number of tour guide companies throughout the Cayo District. In those early days, little information was available for tour guides, so BVAR archaeologists trained the first tour guides and Awe wrote a chapter on Maya civilization [166] as a training material for the National Tour Guide Certification Program. Awe added to this literature with two subsequent publications titled "101 Questions and Answers about the Maya of Belize" [167] and "Maya Cities and Sacred Caves: A Guide to the Maya Sites of Belize" [168]. In 2012, Awe also received a grant from the Inter-American Development Bank to train tour guides across Belize. This allowed Awe and Hoggarth to launch the Northern and Southern Belize Cultural Tourism Training Project, which provided multi-day training workshops, and the publishing and donation of the training manuals [169,170] to tour guides in both Maya and multi-ethnic communities in both regions. These examples show how archaeology can have direct impacts on the economies of local communities. Having both Belizean and foreign directors and staff members of the project allows the BVAR project to develop outreach materials that will appeal to both local and international communities alike. As in the project efforts to engage with local artisan groups, the relationships with tour guides has continued to change, as Guerra works with the Cayo Cave Guide Association to make new initiatives to offer virtual lectures by researchers around the world for educating the tour guides on the most recent findings in Maya archaeology.

Providing professional training in archaeology and heritage conservation has also been an important endeavor of Belizean archaeology. During the Tourism Development Project, and thereafter during his tenure as the Director of the Institute of Archaeology, Awe facilitated opportunities for project members to be trained in the replication of monuments in fiber glass, for Beardall to pursue a Bachelor's degree in Taiwan, for Guerra to begin his graduate program at the University of New Mexico, and for other Institute of Archaeology members to pursue graduate degrees in heritage management in England and the United States.

Table 2. Some Highlights of BVAR's public archaeology and heritage outreach over the past 40 years.

Year	Heritage and Outreach
1977	Joseph Palacio's work at Hokeb Ha Cave and Xunantunich. First archaeological research projects conducted by a Belizean anthropologist. Palacio served as Archaeological Commissioner of Belize from 1971 to 1976. He hired Harriot Topsey and Jaime Awe.
1987	Awe provide images of Maya art and transported slate from Pacbitun, to Maria Garcia in San Antonio village. Maria and family, famously known as the Garcia sisters, used the images and slate to produce some of the most exquisite slate carvings for sale in Belize.
1988	Awe applies for and receives grant from the Canadian Commission for UNESCO and the Canadian International Development Agency to launch a joint archaeology and heritage management project at Cahal Pech in Western Belize.
	Awe wrote the first guidebook to Cahal Pech, published it, and delivered copies to the Cayo Branch of the Belize Tourism Industry Association (BTIA)
1990–1993	The site survey was completed in 1990 and Cahal Pech was converted into an archaeological reserve in 1993.
1993	BVAR conducted salvage archaeology all around San Ignacio Town and disseminated the information in publications such as <i>Now You See It Now You Don't</i> (Awe 1993)
1994–2000	BVAR launches the Western Belize Regional Cave Project (WBRCP). The work at ATM and Barton Creek Cave led to their declaration as archaeological reserves. BVAR archaeologists also trained the first tour guides for these sites.
2000–2004	BVAR archaeologists were employed by the Tourism Development Project (TDP) to excavate and conserve six of the largest archaeological sites in Belize. Accomplishments of this project include the conservation of several sites, the development of archaeo-tourism in Belize, and the training and hiring of several Belizeans in heritage management.
2003	BVAR archaeologists write and produce brochures for several sites in Belize.
2004	Awe writes chapter on Maya Civilization of Belize for National Tour Guide Training Manual
2005	Awe publishes "101 Questions and Answers" book.
2006	Awe publishes "Maya Cities and Sacred Caves: A Guide to the Archaeological Sites of Belize" book.
2006–2013	Awe teams up with Channel 7 Belize and launches TV series: <i>Glimpses of the Past: Celebrating Belize's Archaeological Heritage</i> .
	Awe also publishes several articles on archaeological discoveries in <i>NICH Magazine</i> and <i>Belize Today Magazine</i>
2012	Awe applies for and receives grant from Inter-American Development Bank to train tour guides. Awe and Hoggarth then launch the Northern and Southern Belize Cultural Tourism Training Project. They also publish and donate copies of the training manual to tour guides in several communities in northern and Southern Belize.
2012–present	BVAR conservation projects at Cahal Pech and Xunantunich funded by the Tilden Family Foundation
2014–2018	Jeremiah Donovan (SUNY Courtland) and Jaime Awe launch Future of the Past: Revitalizing Ancient Maya Ceramic Traditions in a Modern Maya Community Project.
2018–current	Watkins and other BVAR staff initiate collaborations with the Fajina Archaeological Outreach program's annual Succotz Archaeology and Culture Fair
2020–current	Hoggarth and Awe expand the ceramic traditions project to include 3D models of ceramics, funded by the Archaeological Institute of America-National Endowment for the Humanities.

BVAR's early settlement surveys around San Ignacio were literally races against the clock to avoid the destruction of archaeological features, as increasing areas were bulldozed and developed and archaeological remains vanished forever. Through this salvage archaeology effort, information was able to be recorded prior to the destruction of many areas of San Ignacio town. Publications like Awe's [171] *Now You See It Now You Don't* are available locally and offer important information about the ancient Maya around Cahal Pech that was only recently disturbed and destroyed by modern

development. Unlike many academic volumes that are published internationally, Awe's [166,167] 101 *Questions and Answers about the Maya of Belize* and his *Maya Cities and Sacred Caves* books are published by local presses which means that they are readily available for populations in Belize. When Burns Avenue in downtown San Ignacio was being converted into a pedestrian walkway, the identification of archaeological remains led Awe to bring Institute of Archaeology archaeologists and Galen students to excavate the cultural deposits [172]. The discoveries from these excavations were later incorporated in a permanent display in the Cayo Welcome Center, giving both locals and visitors a view of what downtown San Ignacio looked like in the past. Recognizing that archaeologists must also employ other media types to reach a broader spectrum of the local population, Awe, between 2006–2013, teamed up with Channel 7 Belize and launched the TV series, *Glimpses of the Past: Celebrating Belize's Archaeological Heritage*. These efforts highlighted various archaeological sites and discoveries and offered the latest information on archaeology to audiences around Belize.

Project staff have been encouraged to develop tours for local community members, school and university students, and other interested groups during the summer field seasons. These tours have been going on since the project's inception, but over the years the project has worked to refine these tours to offer more personalized experiences for visitors. For example, research at Lower Dover was initiated in 2010 and although locals around Unitedville knew of the archaeological site, the lack of investigations there meant that communities did not know about the site's history. Both Guerra and Walden have been working with the local community in Unitedville to offer educational tours while excavations and site survey were in progress. Walden's experience noted that the earliest tours needed more tailored educational materials to give to community members, so information pamphlets and maps were created in order to allow visitors to take the information home with them where they can share with friends and family members. These experiences offered local community members with the opportunity to ask the archaeologists questions that were never anticipated. Guerra has hosted tours for local Belizeans, Galen University students, and the Cayo Tour Guide Association to Lower Dover for several years. Those tours have been successful, although he notes that the outreach to bring in tour guides could be enhanced. A large part of the lack of attendance of tour guides lies in the scheduling, family obligation, and financial issues that may conflict with the timing of excavations and research. Similarly, transportation posed issues for Galen students, preventing some students from working at Lower Dover, although the project was able to accommodate them at the most easily accessible site of Cahal Pech. Similarly, Hoggarth's tours at Baking Pot, being located on the government-operated Central Farm, have been catered to describe ancient agriculture and to highlight the ways that modern agricultural production is operating in the region today.

More recently, the BVAR Project has also teamed up with other heritage and outreach groups to expand the project's ability to engage with local communities. Beginning in 2018, Watkins led the BVAR initiative to work with the Fajina Archaeological Outreach's annual Succotz Archaeology and Culture Fair. The fair aims to promote local Maya culture and to introduce members of the indigenous community of San Jose Succotz, as well as other local multi-ethnic groups, to recent archaeological research in the region. Since the BVAR Project works at the nearby site of Xunantunich, it was important to the project to have a presence at the fair to disseminate recent information and to engage with the community adjacent to the archaeological site. BVAR field school and graduate students helped to run various information booths and to organize various activities at the fair. Some of the most prevalent questions at the BVAR information booth included how individuals could volunteer with the project, as well as access to project resources such as field reports, thesis/dissertations, and other publications. Out of these needs, we developed the one-page research summaries to convey findings quickly to the public, while directing interested community members to the locations online where the full publications could be found. Because the Succotz Archaeology and Culture Fair primarily targets elementary school children, it is important to create activities and information stations that explained some of the basics of local archaeology, including "this is what an archaeologist does", "this is how stone tools are made", and "this is how we read hieroglyphs". By presenting information

at the appropriate age-level, it allows for the individual to make their own interpretations and form their own questions. These interactions have also motivated project members to develop even more engagement activities in the future, such as expanding advertising of local tour days, developing “work with BVAR” events, and expanding the advertisement of our field school lectures. Given the status of the BVAR Project as one of the only Belizean-run archaeological projects in the country, both our Belizean and foreign project members are continually challenged to expand the ways in which we might engage with local communities.

In sum, over the course of the BVAR Project’s three-decade history, the project has sought to disseminate archaeological information, to create heritage management training materials, and offer in-person tours and information booths to engage with local communities. While these initiatives have made significant steps towards the preservation of cultural heritage in Belize, future endeavors will continue this work and aim to involve local communities in the process of archaeological research process.

6. Discussion

Throughout the three decades of BVAR’s history, the project has stressed the integration of both research and public archaeological objectives. The strong focus on cultural heritage has led to successful implementation of programs, as well as continual reflections on how the project can improve to enhance its dual mission. Today, tourism represents about ~21% of the GDP of Belize, employing ~28% of Belize’s population [173]. Some of the greatest impacts that archaeologists can make lie in offering economic opportunities for local communities to benefit from the generation of local archaeological knowledge. BVAR’s long history of involvement in large-scale conservation of archaeological sites across Belize has offered important lessons on how archaeological research is conducted in the country, as well as how that research can benefit local communities. Early efforts were challenged by the lack of local knowledge of conservation practices. This led researchers to build large-scale conservation projects from the ground up, bringing in specialists from neighboring countries to train archaeologists and excavators in conservation management. Continuing work has highlighted developing conservation efforts that emphasize the interactive experience of visitors, allowing them to visualize specific events or experiences of the ancient Maya. This has led the project to collaborate with other researchers to develop immersive virtual reality technologies that allow for site exploration and analysis, 360-degree site tours (<https://sites.psu.edu/archaeology/>), and self-guided education through smartphone technology at Cahal Pech [174]. Future implementation of this sort of technology can enhance the accessibility of archaeological sites that are not publicly open for tourism, such as Baking Pot which is situated on the government-run Central Farm Agricultural Research Station.

Maya heritage studies have asked the question of ‘Where are the Maya in ancient Maya tourism?’ [175]. Many studies have suggested that while governmental agencies and organizations use prehistoric heritage to forge national identities that often have broad international appeal for the tourism industry, local communities sometimes do not share in the economic opportunities and benefits that these initiatives might bring. With these issues in mind, continual reevaluation of the conservation of archaeological sites, as well as the development of educational facilities such as site visitors’ centers or museums, ought to include local community perspectives in the construction of educational narratives. Studies also suggest that tourism can have effects on notions of self-identify [176], including whether communities recognize either direct descent or other relationships to the people who constructed archaeological sites. These perspectives can affect the ways that communities might engage with archaeologists. Further exploration of these issues in Belize, like in other countries, are still needed. Given that cultural heritage is not frozen in the past, but rather continually transforming [177], the role of archaeology must be constantly reevaluated. Within the BVAR Project, Beardall’s MA research on local perceptions of archaeological research and heritage efforts will focus on these issues and hopefully offer important new insights and avenues to pursue in the future.

Conservation and development efforts at archaeological sites have also highlighted some of the dangers of opening locations to large-scale tourism. In the Maya Riviera, for example, Walker [177] describes how the accessibility and appeal of sites such as Tulum can lead to the destruction of archaeological heritage, as these locations are literally ‘loved to death’. Similar threats challenge the conservation of archaeological sites for tourism in Belize. BVAR’s investigations at Actun Tunichil Muknal, and the subsequent development of the cave for tourism, has generated a great deal of economic opportunities for local tour guide companies. Each year, over 30,000 visitors explore the ancient cave system, which is perhaps best known for the Main Chamber’s “Crystal Maiden”. Tourists going off the established trail, or destroying archaeological features, has led the Institute of Archaeology to control the nature of tours more tightly through new restrictions. For example, when a tourist dropped their camera on a human skull in 2012, causing irreparable damage to the bone, the IA prohibited tourists from bringing their own cameras and instead were encouraged to use stock photos of the cave to remember their trips. In other instances, tourists stepped on and broke pot sherds, resulting in the mandate of no shoes being permitted in the cave. Unfortunately, development and conservation can be a double-edged sword, offering important economic opportunities for local communities while endangering the archaeological heritage on which those economies are constructed. Future work must always keep these considerations in mind and work to preserve the archaeological record while not disenfranchising the communities which depend on them.

Lessons learned through the BVAR Project’s heritage and outreach initiatives have suggested multiple media outlets are helpful for public outreach and education today. Twenty years ago, guidebooks were the best way to offer up-to-date archaeological information to tour guides and other interested members of the public. These efforts have expanded to include TV and radio formats, and now to online media and materials that seek to educate various stakeholders across the country and across age groups. Today, BVAR is utilizing media outlets such as Facebook (<https://www.facebook.com/groups/BVARProject/>), Instagram (@bvar.project), and Twitter (@BVAR_Project) to convey archaeological information to the widest audiences. The development of future conservation efforts should utilize virtual and digital media in efforts to reduce the impacts of large-scale tourism at archaeological sites.

Finally, as archaeological projects continue into the future, every effort must be made to avoid top-down and neo-colonialist archaeological agendas that exclude local communities. This history reminds us of the importance of remembering the legacies of the past and to use those memories to create new research projects and practices that are free from neo-colonialist agendas. McAnany [3] reminds us of the dangers of unequal access to archaeological knowledge and landscapes. Training the next generation of archaeologists, heritage managers, and tour guides offers some opportunities to ensure that local perspectives and knowledge are infused into public archaeology in the future. On the BVAR project, mentorship has been key to these endeavors, as students and communities see how other Belizeans have navigated their educational and professional journeys, they can increasingly encourage their children to become advocates for their cultural patrimony. Awe’s mentorship of both Belizean and foreign archaeologists has contributed to the development of some of the leading and emerging voices in Belizean archaeology. The next generation of Belizean archaeologists, including Guerra and Beardall, have developed their own outreach initiatives based on their lived experience. As the identity of stakeholders often forges the relationships formed [176], we must always remember to continually reevaluate the ways in which archaeological process can be more just.

7. Conclusions

At the inception of the Belize Valley Archaeological Reconnaissance (BVAR) Project 32 years ago, the project established dual objectives for research and heritage management. In the past three decades, the project has extended its research to encompass over 30 sites located in central and western Belize and beyond. Conservation of archaeological sites has been a prominent part of the project history, enhancing opportunities for economic growth through tourism. Lessons have been learned through

these consolidation efforts, with significant focus on training Belizeans as conservators. Educational initiatives adopted by BVAR archaeologists have centered on offering training for students, tour guides, and members of the public. As new technologies have developed, BVAR has worked to make educational materials accessible and appealing to local and international communities alike. Heritage and public outreach initiatives have focused on bringing the latest archaeological discoveries to indigenous Maya communities in the region to enhance economic opportunities of artisan groups and tour guides in the villages of San Jose Succotz and San Antonio. As BVAR continues into the future, we aim to continue the dual research and heritage objectives that were established at its inception, placing a strong focus on training the next generation of Belizean archaeologists.

Author Contributions: Conceptualization, J.A.H., J.J.A., C.E.E., R.A.G., A.B.; writing—original draft preparation, J.A.H., J.J.A., and C.E.E.; visualization, J.J.A., C.E.E., J.A.H., and R.A.G.; project administration, J.J.A., J.A.H., C.E.E., and R.A.G.; funding acquisition, J.J.A., J.A.H., C.E.E., R.A.G., T.B.W., and J.P.W. All authors have read and agreed to the published version of the manuscript.

Funding: Funding for the research and conservation programs of sites described in this article were generously provided by the Canadian Commission to UNESCO, the Gordon Childe Fund of the University of London, the Tilden Family Foundation, the Archaeological Institute of America, the Social Sciences and Humanities Research Council of Canada (Awe; Healy and Awe), the Alphawood Foundation (Lidar-Awe), the National Science Foundation (BCS-1460369, Hoggarth; BCS-1450104, DGE- 1255832, Ebert; BCS-1743448, Guerra; BCS-1914638, Walden), the Penn State College of Liberal Arts and Department of Anthropology (Ebert), the Digital Globe Foundation (Ebert), the National Geographic Society (9891-16, Watkins), the University of Pittsburgh Department of Anthropology (Hoggarth and Walden), the Rust Family Foundation (Walden), the Archaeological Institute of America-National Endowment for the Humanities (Hoggarth and Awe), the Belize Ministry of Tourism and Culture, and the BVAR Project.

Acknowledgments: The BVAR Project wishes to thank the Belize Institute of Archaeology for their continued support, as well as Jorge Can and the local Belizean archaeologists who continue to work with us in the field. We are very grateful for the assistance provided to us by the park rangers and staff at Cahal Pech and Xunantunich Archaeological Reserves, the staff at the Central Farm Livestock Section, and to Bill and Madeleine Reynolds of Lower Dover Field Station. Fieldwork at Lower Dover, Barton Ramie and Floral Park was possible due to the generosity of local landowners Julian Sherrard and family (at the Orange Gallery, Unitedville), Mirna Martinez, Lenny Wragg and Menlo P. Dueck. We would also like to thank all students who have participated on the BVAR field school for their enthusiasm and love for learning. Last, but certainly not least, we extend sincere gratitude to Douglas Tilden and the Tilden Family Foundation, the Canadian Commission for Unesco, the Social Sciences and Humanities Research Council of Canada, the National Science Foundation, the Alphawood Foundation, the Rust Family Foundation, the National Geographic Society, and all the various institutions that have funded our work during the last 32 years. Without them none of our research and conservation efforts would be possible.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Jameson, J.H.; Baugher, S. (Eds.) *Past Meets Present: Archaeologists Partnering with Museum Curators, Teachers, and Community Groups*; Springer Science & Business Media: New York, NY, USA, 2007.
2. Seligson, K.E.; Chi Nah, M. Mul Meyaj Tía U Betá Jump’el Kaj: Working Together to Build a Community in Puuc Archaeology. *Heritage* **2020**, *3*, 342–363. [[CrossRef](#)]
3. McAnany, P.A. Imagining a Maya Archaeology that is Anthropological and Attuned to Indigenous Cultural Heritage. *Heritage* **2020**, *3*, 318–330. [[CrossRef](#)]
4. Awe, J.J.; Campbell, M.D. *Department of Anthropology. Site Core Investigations at Cahal Pech, Cayo District, Belize: Preliminary Report of the 1988 Season*; Trent University: Peterborough, ON, Canada, 1989.
5. Awe, J.J.; Bill, C.; Campbell, M.D. *The Cahal Pech, Belize Project: A Progress Report of the Second (1989) Season of Investigations*; Department of Anthropology, Trent University: Peterborough, ON, Canada, 1990.
6. Awe, J.J. Dawn in the Land between the Rivers: Formative Occupation at Cahal Pech, Belize and Its Implications for Preclassic Development in the Maya Lowlands. Ph.D. Thesis, University of London, London, UK, 1992.
7. Awe, J.J.; Campbell, M.D. The 1991 Season of Investigations at Cahal Pech. In *Progress Report of the Fourth Season (1991) of Investigations at Cahal Pech, Belize*; Awe, J.J., Campbell, M.D., Eds.; Department of Anthropology, Trent University: Peterborough, ON, Canada, 1992; pp. 1–8.

8. Goldsmith, A.S. Report on the 1991 Excavations at the K'ik Group, Cahal Pech, Belize. In *Progress Report of the Fourth Season (1991) of Investigations at Cahal Pech, Belize*; Awe, J.J., Campbell, M.D., Eds.; Department of Anthropology, Trent University: Peterborough, ON, Canada, 1992; pp. 9–34.
9. Powis, T. Preliminary Excavations at the Tolok Group: A Settlement Cluster in the Southeastern Periphery of Cahal Pech, Belize. In *Progress Report of the Fourth Season (1991) of Investigations at Cahal Pech, Belize*; Awe, J.J., Campbell, M.D., Eds.; Department of Anthropology, Trent University: Peterborough, ON, Canada, 1992; pp. 35–50.
10. Awe, J.J.; Vinuales, J.; Velasco, M.; Novela, R. Investigations at the Cas Pek Group in the Western Periphery of Cahal Pech, Belize. In *Progress Report of the Fourth Season (1991) of Investigations at Cahal Pech, Belize*; Awe, J.J., Campbell, M.D., Eds.; Department of Anthropology, Trent University: Peterborough, ON, Canada, 1992; pp. 51–58.
11. Iannone, J. Artifacts, Associations, and Analogues: The Eccentric Lithic Artifacts from the Tzinic Group at Cahal Pech, Belize. In *Progress Report of the Fourth Season (1991) of Investigations at Cahal Pech, Belize*; Awe, J.J., Campbell, M.D., Eds.; Department of Anthropology, Trent University: Peterborough, ON, Canada, 1992; pp. 91–118.
12. Awe, J.J.; Aimers, J.; Blanchard, C. A Preclassic Round Structure from the Zozt Group at Cahal Pech, Belize. In *Progress Report of the Fourth Season (1991) of Investigations at Cahal Pech, Belize*; Awe, J.J., Campbell, M.D., Eds.; Department of Anthropology, Trent University: Peterborough, ON, Canada, 1992; pp. 119–140.
13. Iannone, G. Problems in the Study of Ancient Maya Settlement and Social Organization: Insights from the “Minor Centre” of Zubin, Cayo District, Belize. Ph.D. Thesis, University of London, London, UK, 1996.
14. Awe, J.J. (Ed.) *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 1992 Field Season*; Department of Anthropology, Trent University: Peterborough, ON, Canada, 1993.
15. Awe, J.J. Introduction and Summary of the Sixth (1993) Field Season at Cahal Pech and Baking Pot. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 1993 Field Season*; Awe, J.J., Ed.; Department of Anthropology, Trent University: Peterborough, ON, Canada, 1994; pp. 1–2.
16. Conlon, J.M.; Awe, J.J. (Eds.) *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 1994 Field Season*; Institute of Archaeology: London, UK, 1995; Volume 2.
17. Iannone, G.; Conlon, J.M. (Eds.) *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 1994 Field Season*; Institute of Archaeology: London, UK, 1995; Volume 1.
18. Conlon, J.M. (Ed.) *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 1995 Field Season*; Institute of Archaeology: London, UK, 1996.
19. Awe, J.J.; Conlon, J.M. (Eds.) *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 1996 Field Season*; Department of Anthropology, Trent University: Peterborough, ON, Canada, 1997.
20. Aimers, J.J. Preliminary Investigations of Architecture in Plaza 2 of Group 1 at Baking Pot, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 1996 Field Season*; Awe, J.J., Conlon, M.J., Eds.; Department of Anthropology, Trent University: Peterborough, ON, Canada, 1997; pp. 21–46.
21. Moore, A.F. Intragroup Comparative Study of the Ancient Maya in the Periphery of Baking Pot: Report on the First Season of Investigations at the Atalaya Group. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 1996 Field Season*; Awe, J.J., Conlon, J.M., Eds.; Department of Anthropology, Trent University: Peterborough, ON, Canada, 1997; pp. 47–58.
22. Aimers, J.J. Abandonment and Non-abandonment at Baking Pot, Belize. In *The Archaeology of Settlement Abandonment in Middle America*; Inomata, T., Webb, R.W., Eds.; University of Utah Press: Salt Lake City, UT, USA, 2003; pp. 149–162.
23. Hohmann, B.M.; Powis, T.G. Middle Formative Occupation at Pacbitun, Belize: Report on the 1996 Field Season. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 1996 Field Season*; Awe, J.J., Conlon, J.M., Eds.; Department of Anthropology, Trent University: Peterborough, ON, Canada, 1997; pp. 71–80.
24. Moyes, H.; Awe, J.J. Spatial Analysis of Artifacts in the Main Chamber of Actun Tunichil Muknal, Belize: Preliminary Results. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 1997 Field Season*; Awe, J.J., Ed.; Department of Anthropology, Trent University: Peterborough, ON, Canada, 1998; pp. 23–36.

25. Griffith, C.S. Excavations and Salvage Operations in Actun Tunichil Muknal and Actun Uayazaba Kab, Roaring Creek Valley, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 1997 Field Season*; Awe, J.J., Ed.; Department of Anthropology, University of New Hampshire: Durham, NH, USA, 1998; pp. 37–70.
26. Griffith, C.S. Patterns in the Darkness: Reports on the 1998 Investigations at Actun Uayazaba Kab, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 1998 Field Season*; Awe, J.J., Ed.; Department of Anthropology, University of New Hampshire: Durham, NH, USA, 1999; pp. 85–104.
27. Mirro, M.; Awe, J.J. Report of Investigations on Ledge 1 at Actun Yaxteel Ahau, Roaring Creek Valley, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 1998 Field Season*; Awe, J.J., Ed.; Department of Anthropology, University of New Hampshire: Durham, NH, USA, 1999; pp. 166–187.
28. Ferguson, J.M. Architecture from Within: A Report on the Investigation of Entrance II, Actun Chapat, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 1999 Field Season*; Griffith, C.S., Ishihara, R., Awe, J.J., Eds.; Department of Anthropology, University of New Hampshire: Durham, NH, USA, 2000; pp. 163–188.
29. Ferguson, J.M. A Preliminary Report on the Investigations in Chamber 3B, Actun Chapat, Macal River Valley, Cayo District, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2000 Field Season*; Ishihara, R., Griffith, C.S., Awe, J.J., Eds.; Department of Anthropology University of New Hampshire: Durham, NH, USA, 2001; pp. 185–194.
30. Griffith, C.S.; Ishihara, R.; Jack, S. Report on the 3rd and 4th Seasons of Archaeological Investigations in Actun Chapat. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2002 Field Season*; Awe, J.J., Audet, C.M., Eds.; Belize Department of Archaeology, Ministry of Tourism: Belmopan, Belize, 2003; pp. 94–118.
31. Halperin, C.T.; Gibbs, S.A.; Hodgman, D. Excavation and Survey at Actun Nak Beh and the Cahal Uitz Na Causeway, Cayo District, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2000 Field Season*; Ishihara, R., Griffith, C.S., Awe, J.J., Eds.; Department of Anthropology, University of New Hampshire: Durham, NH, USA, 2001; pp. 1–24.
32. Mirro, M.; Mirro, V. A Report of the 2000 Field Season at the Barton Creek Cave, Cayo District, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2000 Field Season*; Ishihara, R., Griffith, C.S., Awe, J.J., Eds.; Department of Anthropology, University of New Hampshire: Durham, NH, USA, 2001; pp. 97–126.
33. Griffith, C.S.; Ishihara, R.; Jack, S. Report on the Third Year of Archaeological Investigations in Actun Halal. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2001 Field Season*; Awe, J.J., Griffith, C.S., Eds.; Belize Department of Archaeology, Ministry of Tourism: Belmopan, Belize, 2002; Volume 1, pp. 27–50.
34. Griffith, C.S.; Torres, R. Preliminary Archaeological Investigations in Actun Oxyehub, Sibun Valley, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2001 Field Season*; Awe, J.J., Griffith, C.S., Eds.; Belize Department of Archaeology, Ministry of Tourism: Belmopan, Belize, 2002; Volume 1, pp. 61–68.
35. Helmke, C.G.B.; Ishihara, R. Archaeological Reconnaissance of Cueva Migdalia, Barton Creek Valley, Cayo District, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2001 Field Season*; Awe, J.J., Griffith, C.S., Eds.; Belize Department of Archaeology, Ministry of Tourism: Belmopan, Belize, 2002; Volume 1, pp. 111–152.
36. Dema, B.R.; Griffith, C.; Ishihara, R. Preliminary Investigations in Actun Chuplal, Macal Valley, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2001 Field Season*; Awe, J.J., Griffith, C.S., Eds.; Belize Department of Archaeology, Ministry of Tourism: Belmopan, Belize, 2002; Volume 1, pp. 69–76.
37. Moyes, H. Excavations at Chechem Ha Cave: Preliminary Results of the 2002 Field Season. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2002 Field Season*; Awe, J.J., Audet, C.M., Eds.; Belize Department of Archaeology, Ministry of Tourism: Belmopan, Belize, 2003; pp. 94–118.
38. Moyes, H. The Cave as a Cosmogram: The Use of GIS in an Intrasite Spatial Analysis of the Main Chamber of Actun Tunichil Muknal, A Maya Ceremonial Cave in Western Belize. Ph.D. Thesis, Florida Atlantic University, Boca Raton, FL, USA, 2001.

39. Moyes, H.; Awe, J.J.; Brook, G.A.; Webster, J.W. The ancient Maya drought cult: Late Classic cave use in Belize. *Lat. Am. Antiq.* **2009**, *20*, 175–206. [[CrossRef](#)]

40. Helmke, C.G.B.; Piehl, J.C.; Bassendale, M.L. Pook’s Hill 1, Operation 4A: Test Excavations of the Plaza Platform and Eastern Shrine Structure 4A, Roaring Creek Valley, Cayo District, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2000 Field Season*; Ishihara, R., Griffith, C.S., Awe, J.J., Eds.; Department of Anthropology, University of New Hampshire: Durham, NH, USA, 2001; pp. 325–390.

41. Helmke, C.G.B.; Stanchly, N.; Piehl, J.C.; Morehart, C.T. Pook’s Hill 1, Operations 5A and 6A: Test Excavations of the Plaza Platform and Structure 2A, Roaring Creek Valley, Cayo District, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2000 Field Season*; Ishihara, R., Griffith, C.S., Awe, J.J., Eds.; Department of Anthropology, University of New Hampshire: Durham, NH, USA, 2001; pp. 391–446.

42. Conlon, J.M.; Ehret, J.J. Ancient Maya Settlement at Baking Pot, Belize: Final Results of the North Caracol Farm Survey Program. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2000 Field Season*; Ishihara, R., Griffith, C.S., Awe, J.J., Eds.; Department of Anthropology, University of New Hampshire: Durham, NH, USA, 2000; pp. 301–308.

43. Ehret, J.J.; Conlon, J.M. Results of the Second Season (2000) Surface Collection Program at Baking Pot: The Northeast Baking Pot and North Caracol Farm Settlement Clusters. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2000 Field Season*; Ishihara, R., Griffith, C.S., Awe, J.J., Eds.; Department of Anthropology, University of New Hampshire: Durham, NH, USA, 2001; pp. 309–324.

44. Audet, C.M.; Awe, J.J. Preliminary Investigations at the Yaxtun Group, Baking Pot. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 1999 Field Season*; Griffith, C.S., Ishihara, R., Awe, J.J., Eds.; Department of Anthropology, University of New Hampshire: Durham, NH, USA, 2000; pp. 1–14.

45. Awe, J.J.; Audet, C.M. (Eds.) *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2002 Field Season*; Belize Department of Archaeology, Ministry of Tourism: Belmopan, Belize, 2003.

46. Hoggarth, J.A. *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2004 Field Season*; Helmke, C.G.B., Awe, J.J., Eds.; Belize Department of Archaeology, Ministry of Tourism: Belmopan, Belize, 2005; pp. 21–22.

47. Swain, L. *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2004 Field Season*; Helmke, C.G.B., Awe, J.J., Eds.; Belize Department of Archaeology, Ministry of Tourism: Belmopan, Belize, 2005; pp. 13–20.

48. Audet, C.M. Excavations of Structures B and G, Plaza 2, Group 2, Baking Pot. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2004 Field Season*; Helmke, C.G.B., Awe, J.J., Eds.; Belize Department of Archaeology, Ministry of Tourism: Belmopan, Belize, 2005; pp. 1–12.

49. Audet, C.M. Excavations of Structure 190, Baking Pot, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2003 Field Season*; Audet, C.M., Awe, J.J., Eds.; Belize Department of Archaeology, Ministry of Tourism: Belmopan, Belize, 2004; pp. 35–52.

50. Piehl, J.C.; Awe, J.J. Scalping as a Component of Terminus Structure Ritual at the Site of Baking Pot, Belize Valley. *Res. Rep. Belizean Archaeol.* **2010**, *7*, 55–63.

51. Dixon, C.C. Preliminary Report on the Excavation of Structure 51, Baking Pot. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2004 Field Season*; Helmke, C.G.B., Awe, J.J., Eds.; Belize Department of Archaeology, Ministry of Tourism: Belmopan, Belize, 2005; pp. 23–30.

52. Dixon, C.; Hoggarth, J.A. Excavations of Structure 188, Baking Pot, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2003 Field Season*; Audet, C.M., Awe, J.J., Eds.; Belize Department of Archaeology, Ministry of Tourism: Belmopan, Belize, 2004; pp. 26–34.

53. Hayes, S.E. Utilizing Soil Productivity to Estimate Maya Population at Baking Pot. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2004 Field Season*; Helmke, C.G.B., Awe, J.J., Eds.; Belize Department of Archaeology, Ministry of Tourism: Belmopan, Belize, 2005; pp. 31–46.

54. Poe, W.C. Baking Pot, Settlement Survey. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2004 Field Season*; Helmke, C.G.B., Awe, J.J., Eds.; Belize Department of Archaeology, Ministry of Tourism: Belmopan, Belize, 2005; pp. 47–50.

55. Audet, C.M. Political Organization in the Belize Valley: Excavations at Baking Pot, Cahal Pech and Xunantunich. Ph.D. Thesis, Vanderbilt University, Nashville, TN, USA, 2006.

56. Weller, E. Excavations at the South Acropolis, Caracol. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2002 Field Season*; Awe, J.J., Audet, C.M., Eds.; Belize Department of Archaeology, Ministry of Tourism: Belmopan, Belize, 2003; pp. 52–58.

57. McNassar, J.; Awe, J.J.; Audet, C. Excavations at Structure 29, Group B, Caracol. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2002 Field Season*; Awe, J.J., Audet, C.M., Eds.; Belize Department of Archaeology, Ministry of Tourism: Belmopan, Belize, 2003; pp. 59–63.

58. Ishihara, R.; Jack, S. The Mountain-Cave Complex at the Pyramid Caana: A Report on the Investigations of the Tufa at the Base of Caana. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2002 Field Season*; Awe, J.J., Audet, C.M., Eds.; Belize Department of Archaeology, Ministry of Tourism: Belmopan, Belize, 2003; pp. 83–93.

59. Awe, J.J.; Helmke, C.; Aimers, J.J.; Ebert, C.E.; Stemp, W.J.; Hoggarth, J.A. Applying Regional, Contextual, Ethnohistoric, and Ethnographic Approaches for Understanding the Significance of Peri-Abandonment Deposits in Western Belize. *Anc. Mesoam.* **2020**, *31*, 109–126. [[CrossRef](#)]

60. Helmke, C.; Awe, J.; Grube, N. The Carved Monuments and Inscriptions of Xunantunich: Implications for Terminal Classic Sociopolitical Relationships in the Belize Valley. In *Classic Maya Provincial Politics: Xunantunich and Its Hinterlands*; LeCount, L.J., Yaeger, J., Eds.; University of Arizona Press: Tucson, AZ, USA, 2010; pp. 97–121.

61. Awe, J.J.; Weinberg, D.M.; Guerra, R.A.; Schwanke, M. *Archaeological Mitigation in the Upper Macal River Valley: Final Report of Investigations Conducted Between June 2003 to December 2004*; The Belize Institute of Archaeology: Belize City, Belize; Belize Electric Company Limited: Belmopan, Belize, 2005; Submitted.

62. Helmke, C.G.B. A Report of the 2005 Season of Archaeological Investigations at Pook’s Hill, Cayo District, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2005 Field Season*; Helmke, C.G.B., Awe, J.J., Eds.; Belize Department of Archaeology, Ministry of Tourism: Belmopan, Belize, 2006; pp. 39–92.

63. Jordan, J.M.; Guerra, R.A. Reconnaissance and Preliminary Survey at the Site of Baateelek, Caves Branch River Valley, Cayo District, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2006 Field Season*; Helmke, C.G.B., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2007; pp. 11–18.

64. Morton, S.G. Preliminary Reconnaissance of Three Caves in the Cave Branch River Valley, Cayo District, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2007 Field Season*; Helmke, C.G.B., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2008; pp. 49–68.

65. Wrobel, G.D. Report on the Caves Branch Rockshelter Excavations: 2006 and 2007 Field Seasons. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2007 Field Season*; Helmke, C.G.B., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2008; pp. 1–20.

66. Wrobel, G.D.; Tyler, J.C. Revisiting Caves Branch Rockshelter: Results of the 2005 Excavations. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2005 Field Season*; Helmke, C.G.B., Awe, J.J., Eds.; Belize Department of Archaeology, Ministry of Tourism: Belmopan, Belize, 2006; pp. 1–10.

67. Awe, J.J.; Schwanke, M.M. Preliminary Investigation of Structure C2, Cahal Pech, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2005 Field Season*; Helmke, C.G.B., Awe, J.J., Eds.; Belize Department of Archaeology, Ministry of Tourism: Belmopan, Belize, 2006; pp. 135–142.

68. Helmke, C.G.B. Excavations of Structures B1 and B7 at Baking Pot, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2007 Field Season*; Helmke, C.G.B., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2008; pp. 109–144.

69. Helmke, C.G.B.; Jordan, J.M.; Pritchard, J.C. Survey of the Monumental Epicenter of Baking Pot, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2007 Field Season*; Helmke, C.G.B., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2008; pp. 103–108.

70. Hoggarth, J.A. Settlement and Community Organization in the Classic to Postclassic Transition: Research Methodology and Aims of the 2007 to 2010 Settlement Research at Baking Pot, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2008 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2009; pp. 1–25.

71. Hoggarth, J.A.; Jobbová, E.; Helmke, C.; Bevan, A. Settlement Survey at Baking Pot, Belize: Results of the 2007 Season. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2007 Field Season*; Helmke, C.G.B., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2008; pp. 157–188.

72. Awe, J.J. Journey on the Cahal Pech time machine: An archaeological reconstruction of the dynastic sequence at a Belize valley Maya polity. *Res. Rep. Belizean Archaeol.* **2013**, *10*, 33–50.

73. Jobbova, E. Comparative Settlement at Baking Pot, Barton Ramie, and Spanish Lookout: Results of the 2009 Settlement Survey in the Belize Valley. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2008 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2009; pp. 89–121.

74. Bednar, S.E. Settlement Research at Baking Pot, Belize: Excavation at M-181. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2010 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2011; pp. 58–61.

75. Hoggarth, J.A. Continuing Settlement Research in Settlement Cluster C: Excavations in the Ixim Group, Baking Pot, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2009 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2010; pp. 38–46.

76. Jordan, J.M. Excavations at M-91 and M-181: Results from Two Excavations in Settlement Cluster C at Baking Pot. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2008 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2009; pp. 50–59.

77. Jordan, J.M. Excavations at M-109, M-110, and M-111 at Baking Pot, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2009 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2010; pp. 47–55.

78. Lamb, C. 2009 Research in Settlement Cluster C, Baking Pot: Preliminary Findings from M-101. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2009 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2010; pp. 56–68.

79. Pelayo, P.A. 2008–2009 Excavations of Mound 96 at Baking Pot, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2009 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2010; pp. 69–100.

80. Santasilia, C.E.; Ramos, J. Excavation of M-94 and M-95 at Baking Pot, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2010 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2011; pp. 69–74.

81. Zweig, C.; Russell, B. Extending into the Past: A Report of the 2008 Excavations at Structure M-101, Baking Pot, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2008 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2009; pp. 36–49.

82. Hoggarth, J.A. Social Reorganization and Household Adaptation in the Aftermath of Collapse at Baking Pot, Belize. Ph.D. Thesis, University of Pittsburgh, Pittsburgh, PA, USA, 2012.

83. Bullard, W.R.; Bullard, M.R. *Late Classic Finds at Baking Pot, British Honduras*; Royal Ontario Museum: Toronto, ON, Canada, 1965; Volume 8.

84. Guerra, R.A. Preliminary Survey of the Lower Dover Maya Site, Unitedville Village, Cayo District, Belize, Central America. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2009 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2011; pp. 1–6.

85. Guerra, R.A.; Arksey, M. 2011 Excavations at the Major Center of Lower Dover. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2010 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2012; pp. 108–120.

86. Guerra, R.A.; Awe, J.J. Recent Investigations at the Major Center of Lower Dover in the Belize River Valley. *Res. Rep. Belizean Archaeol.* **2017**, *14*, 241–248.

87. Guerra, R.A.; Morton, S.G. 2011 Survey at Lower Dover. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2010 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2012; pp. 105–107.

88. Guerra, R.A.; Petrozza, M.; Pollett, R. Excavations at Lower Dover Plaza F: Results of the 2012 Season. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2012 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2013; pp. 210–232.

89. Petrozza, M.L. Archaeological Investigations of the Lower Dover Periphery, Cayo District, Belize, Central America. Master's Thesis, Texas State University, San Marcos, TX, USA, 2015.

90. Wilkinson, P.; Hude, M. 2010 Excavations at the Major Center of Lower Dover. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2010 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2011; pp. 7–14.

91. Petrozza, M.L.; Biggie, M. Lower Dover Settlement Survey 2014 Field Season. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2014 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2015; pp. 25–37.
92. Walden, J.P.; Biggie, M.; Ebert, C.E. Survey and Settlement Pattern Analysis in the Lower Dover Hinterland: Results of the 2016 Field Season. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2016 Field Season*; Ebert, C.E., Burke, C.C., Awe, J.J., Hoggarth, J.A., Eds.; Institute of Archaeology, Baylor University: Waco, TX, USA; Department of Anthropology, Northern Arizona University: Flagstaff, AZ, USA, 2017; pp. 238–288.
93. Walden, J.P.; Biggie, M.; Thompson, A.; Shaw-Muller, K.; Levin, A.; Nachamie, A.; Baldwin, D.; McKeown, A.; Green, K.A.; Bongiovanni, R.; et al. Settlement Excavations in the Lower Dover Periphery: Results of the 2017 Field Season. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2017 Field Season*; Ebert, C.E., Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology, Baylor University: Waco, TX, USA; Department of Anthropology, Northern Arizona University: Flagstaff, AZ, USA, 2018; pp. 173–264.
94. Walden, J.P.; Guerra, R.A.; Yijia, Q. The 2018 Lower Dover Survey and Excavations in the Tutu Uitz Na Neighborhood. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2018 Field Season*; Ebert, C.E., Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology, Baylor University: Waco, TX, USA; Department of Anthropology, Northern Arizona University: Flagstaff, AZ, USA, 2019; pp. 169–185.
95. Willey, G.R.; Bullard, W.R.; Glass, J.B.; Gifford, J.C. *Prehistoric Maya Settlements in the Belize Valley*; Peabody Museum, Harvard University: Cambridge, MA, USA, 1965; Volume 54.
96. Walden, J.P.; Ebert, C.E.; Hoggarth, J.A.; Montgomery, S.M.; Awe, J.J. Modeling variability in Classic Maya intermediate elite political strategies through multivariate analysis of settlement patterns. *J. Anthropol. Archaeol.* **2019**, *55*, 101074. [\[CrossRef\]](#)
97. Watkins, T.B.; Bongiovanni, R.; Green, K.; Burke, C.C. Investigations of the Palace Complex at Lower Dover: Results from the 2016 Excavations in Courtyard 2. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2016 Field Season*; Ebert, C.E., Burke, C.C., Awe, J.J., Hoggarth, J.A., Eds.; Institute of Archaeology, Baylor University: Waco, TX, USA; Department of Anthropology, Northern Arizona University: Flagstaff, AZ, USA, 2017; pp. 136–166.
98. Dorenbusch, W.R. Western and Northern Settlement Survey of Cahal Pech. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2012 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2013; pp. 168–184.
99. Ebert, C.E. Preclassic Maya Social Complexity and the Origins of Inequality at Cahal Pech, Belize. Ph.D. Thesis, Department of Anthropology, Pennsylvania State University, State College, FL, USA, 2017.
100. Ebert, C.E.; Dennehy, T. Preliminary Investigations at Tzutziy K'in. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2012 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2013; pp. 185–209.
101. Ebert, C.E.; Fox, S. The 2015 Settlement Excavations at Cahal Pech, Belize: Continued Research at Tzutziy K'in, the Zopilote Group, and the Martinez Group. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2016 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology, Baylor University: Waco, TX, USA; Department of Anthropology, Northern Arizona University: Flagstaff, AZ, USA, 2017; pp. 80–112.
102. Ebert, C.E.; Culleton, B.J.; Awe, J.J.; Kennett, D.J. AMS ^{14}C dating of Preclassic to Classic Period household construction in the ancient Maya community of Cahal Pech, Belize. *Radiocarbon* **2016**, *58*, 69–87. [\[CrossRef\]](#)
103. Ebert, C.E.; May, N.P.; Culleton, B.J.; Awe, J.J.; Kennett, D.J. Regional response to drought during the formation and decline of Preclassic Maya societies. *Quat. Sci. Rev.* **2017**, *173*, 211–235. [\[CrossRef\]](#)
104. Fox, S.; Awe, J.J. Ritual Termination and Ancestor Reverence: The 2016 Excavations at Structure 2, Zopilote. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2016 Field Season*; Ebert, C.E., Burke, C.C., Awe, J.J., Hoggarth, J.A., Eds.; Institute of Archaeology, Baylor University: Waco, TX, USA; Department of Anthropology, Northern Arizona University: Flagstaff, AZ, USA, 2017; pp. 66–79.
105. Fox, S. Revering the Past: The Analysis of Terminus Groups in the Maya Lowlands. Master's Thesis, Department of Anthropology, Northern Arizona University, Flagstaff, AZ, USA, 2018.
106. Chase, A.F.; Chase, D.Z.; Awe, J.J.; Weishampel, J.F.; Iannone, G.; Moyes, H.; Yaeger, J.; Brown, M.K. The use of LiDAR in understanding the ancient Maya landscape: Caracol and western Belize. *Adv. Archaeol. Pract.* **2014**, *2*, 208–221. [\[CrossRef\]](#)

107. Awe, J.J.; Ebert, C.E.; Hoggarth, J.A. Three k'atuns of pioneering settlement research: Preliminary results of lidar survey in the Belize River Valley. In *Breaking Barriers, Proceedings of the 47th Annual Chacmool Conference, Calgary, AB, Canada, 7–9 November 2014*; University of Calgary: Calgary, AB, Canada, 2015; pp. 57–75.
108. Ebert, C.E.; Hoggarth, J.A.; Awe, J.J. Integrating quantitative lidar analysis and settlement survey in the Belize River Valley. *Adv. Archaeol. Pract.* **2016**, *4*, 284–300. [[CrossRef](#)]
109. Kollias, G.V., III. Investigating the Maya Polity at Lower Barton Creek, Cayo, Belize. Master's Thesis, Department of Anthropology, Northern Arizona University, Flagstaff, AZ, USA, 2016.
110. Pritchard, J.C.; Saunders, C.M.; Pritchard, C.W.; Santasilia, C. Excavation at Cahal Pech's Structures C-3 and C-6: Results of the 2010 Season. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2010 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2011; pp. 15–28.
111. Santasilia, C.E. Excavations in the Eastern Ballcourt, Cahal Pech. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2012 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2013; pp. 51–59.
112. Conlon, J.M. Archaeological Investigations of Structure B-3, Cahal Pech: A Preliminary Report. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2012 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2013; pp. 60–70.
113. Brito, I.; Can, R.J.; Awe, J.J. Excavations and Conservation of Structure B1-West Face. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2012 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2013; pp. 71–89.
114. Pritchard, C.W. Excavation Summary of Plaza C Units along Structure B1 and B2 at Cahal Pech. Excavations and Conservation of Structure B1-West Face. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2012 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2013; pp. 29–43.
115. Pritchard, J.C. Excavations of Structure C-3 South, Cahal Pech. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2012 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2013; pp. 44–50.
116. Santasilia, C.E. Excavations of the Staircase between Plazas C, H, and B at Cahal Pech. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2012 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2013; pp. 21–28.
117. Santasilia, C.E. The Discovery of an Early Classic Maya Tomb: Excavations at the Western Façade of Structure B1 at Cahal Pech. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2013 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2014; pp. 42–51.
118. Lopez, J.A.; Pritchard, C.W.; Saunders, C.M. Preliminary Excavations of Structure B6/7, Cahal Pech. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2013 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2014; pp. 77–92.
119. Horn, S.W., III. The Web of Complexity: Socioeconomic Networks in the Middle Preclassic Belize Valley. Ph.D. Thesis, Department of Anthropology, Tulane University, New Orleans, LA, USA, 2015.
120. Peniche May, N. Building Power: Political Dynamics in Cahal Pech, Belize during the Middle Preclassic. Ph.D. Thesis, Department of Anthropology, University of California San Diego, San Diego, CA, USA, 2016.
121. Gritffith, C. The South Side of Town: A Preliminary Report on the Investigations of Structure G-1, Cahal Pech. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2013 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2014; pp. 1–15.
122. Stanchly, N. The 2013 Excavations of Structure G-2, Cahal Pech, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2013 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2014; pp. 16–23.
123. Peniche May, N.; Beardall, A. Excavations of Structure G-1, Cahal Pech: 2014 Field Season. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2014 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2015; pp. 130–137.
124. Douglas, J.E.; Brown, L.J. The Terminal Classic Occupation in Plaza H, Cahal Pech: Preliminary Findings. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2013 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2014; pp. 93–127.

125. Douglas, J.E.; Brown, L.J. The Terminal Classic at Plaza H, Cahal Pech: Preliminary Findings. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2014 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2015; pp. 53–86.

126. Douglas, J.E.; Brown, L.J.; Plaza, H. Cahal Pech: Results of the Fifth January Season. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2016 Field Season*; Ebert, C.E., Burke, C.C., Awe, J.J., Hoggarth, J.A., Eds.; Institute of Archaeology, Baylor University: Waco, TX, USA; Department of Anthropology, Northern Arizona University: Flagstaff, AZ, USA, 2016; pp. 52–79.

127. Ebert, C.E. Preclassic Plaza Investigations at Cahal Pech, Belize: Results of the 2017 Excavations in Plaza B. In *The Belize Valley Archaeological Reconnaissance Project: A Report of the 2017 Field Season*; Ebert, C.E., Hoggarth, J.A., Awe, J.J., Eds.; Department of Anthropology, Northern Arizona University: Flagstaff, AZ, USA; Institute of Archaeology, Baylor University: Waco, TX, USA, 2018; pp. 1–47.

128. Ebert, C.E.; McGee, J.; Dudash, K.; Porter, M. Early Monumentality in the Belize River Valley: Excavations of a Middle Preclassic E-Group Assemblage at Cahal Pech, Belize. In *The Belize Valley Archaeological Reconnaissance Project: A Report of the 2018 Field Season*; Ebert, C.E., Walden, J.P., Hoggarth, J.A., Awe, J.J., Eds.; Department of Anthropology, Northern Arizona University: Flagstaff, AZ, USA; Institute of Archaeology, Baylor University: Waco, TX, USA, 2019; pp. 1–23.

129. Ebert, C.E.; Watkins, T.B.; Saldaña, G.; Izzo, V.; Can, J.; Awe, J.J. The Fifth Season of the Xunantunich Archaeological and Conservation Project: A Report of the 2019 Excavations and Conservation at Plaza A-III and Group B. In *The Belize Valley Archaeological Reconnaissance Project: A Report of the 2019 Field Season*; Ebert, C.E., Walden, J., Hoggarth, J.A., Awe, J.J., Eds.; Department of Anthropology, Northern Arizona University: Flagstaff, AZ, USA; Institute of Archaeology, Baylor University: Waco, TX, USA, 2020; pp. 105–124.

130. Davis, J.B. Laboratory Methods and Analyses for Peri-Abandonment Deposits in Baking Pot's Group B. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2013 Field Season*; Ebert, C.E., Hoggarth, J.A., Awe, J.J., Eds.; Department of Anthropology, Northern Arizona University: Flagstaff, AZ, USA; Institute of Archaeology, Baylor University: Waco, TX, USA, 2018; pp. 240–267.

131. Hoggarth, J.A.; Culleton, B.J.; Awe, J.J.; Helmke, C.; Lonaker, S.; Davis, J.B.; Kennett, D.J. Building High-Precision AMS 14C Bayesian Models for the Formation of Peri-Abandonment Deposits at Baking Pot. *Radiocarbon*. Accepted.

132. Davis, J.B. Scattered, Smothered, and Covered: The Cultural Significance of Terminal Classic Deposits at Baking Pot, Belize. Master's Thesis, Department of Anthropology, Northern Arizona University, Flagstaff, AZ, USA, 2018.

133. Hoggarth, J.A.; Culleton, B.J.; Awe, J.J.; Kennett, D.J. Questioning Postclassic continuity at Baking Pot, Belize, using direct AMS 14C dating of human burials. *Radiocarbon* **2014**, *56*, 1057–1075. [\[CrossRef\]](#)

134. Hoggarth, J.A.; Awe, J.J.; Bednar, S.E.; Johnson, A.L.; McKeown, A.; Lonaker, S.; Green, K.; Moraza-Keeswood, N.; Ray, E.; Walden, J. How it Falls Apart: Identifying Terminal Deposits in Group B to Date the 'Classic Maya Collapse' at Baking Pot, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2013 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2014; pp. 240–267.

135. Lonaker, S.; Davis, B.; Moraza-Keeswood, N.; Hoggarth, J.A. Group B, Plaza B, Peri-Abandonment Deposit Excavations at Baking Pot, Belize. In *The Belize Valley Archaeological Reconnaissance Project: A Report of the 2016 Field Season*; Ebert, C.E., Burke, C.C., Awe, J.J., Hoggarth, J.A., Eds.; Department of Anthropology, Northern Arizona University: Flagstaff, AZ, USA; Institute of Archaeology, Baylor University: Waco, TX, USA, 2017; pp. 9–26.

136. Aimers, J.J.; Awe, J.J. The Long Goodbye: Problematic Pottery and Pilgrimage at Cahal Pech, Belize. *Anc. Mesoam.* **2020**, *31*, 151–160. [\[CrossRef\]](#)

137. Aimers, J.J.; Hoggarth, J.A.; Awe, J.J. Decoding the Archaeological Significance of Problematic Deposits in the Maya Lowlands. *Anc. Mesoam.* **2020**, *31*, 67–75. [\[CrossRef\]](#)

138. Awe, J.J.; Ebert, C.E.; Hoggarth, J.A.; Aimers, J.J.; Helmke, C.; Douglas, J.; Stemp, W.J. The Last Hurrah: Examining the Nature of Peri-Abandonment Deposits and Activities at Cahal Pech, Belize. *Anc. Mesoam.* **2020**, *31*, 175–187. [\[CrossRef\]](#)

139. Burke, C.C.; Tappan, K.K.; Wisner, G.B.; Hoggarth, J.A.; Awe, J.J. To Eat, Discard, or Venerate: Faunal Remains as Proxy for Human Behaviors in Lowland Maya Peri-Abandonment Deposits. *Anc. Mesoam.* **2020**, *31*, 127–137. [[CrossRef](#)]

140. Hoggarth, J.A.; Davis, J.B.; Awe, J.J.; Helmke, C. Reconstructing the Formation of Peri-Abandonment Deposits at Baking Pot, Belize. *Anc. Mesoam.* **2020**, *31*, 139–149. [[CrossRef](#)]

141. Stemp, W.J.; Awe, J.J. Point Counter Point: Interpreting Chipped Chert Bifaces in Terminal Classic “Problematic” On-Floor Deposits from Structures A2 and A3 at Cahal Pech, Belize. *Anc. Mesoam.* **2020**, *31*, 161–174. [[CrossRef](#)]

142. Awe, J.J.; Helmke, C.; Slocum, D.; Tilden, D.D. Let’s Talk of Graves, Eccentrics, and Epitaphs: The Socio-Political Implications of Recent Discoveries on Structure A9 at Xunantunich, Belize. *Res. Rep. Belizean Archaeol.* **2019**, *16*, 57–74.

143. Santasilia, C.E.; Tilden, D. 2015 Excavations of the Eastern Triadic Shrine at Xunantunich, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2015 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2016; pp. 118–138.

144. Zanotto, H.; Galvan, D.; Awe, J.J. BVAR 2015 Xunantunich Archaeological Conservation Project Excavations, Operations SC-3, Structures A-20 and A-8. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2015 Field Season*; Hoggarth, J.A., Awe, J.J., Eds.; Institute of Archaeology: Belmopan, Belize, 2016; pp. 139–181.

145. Zanotto, H.H.; Awe, J.J. The Xunantunich Archaeological and Conservation Project: A Progress Report of the Second (2016) Season of Excavations. In *The Belize Valley Archaeological Reconnaissance Project: A Report of the 2016 Field Season*; Ebert, C.E., Burke, C.C., Awe, J.J., Hoggarth, J.A., Eds.; Department of Anthropology, Northern Arizona University: Flagstaff, AZ, USA; Institute of Archaeology, Baylor University: Waco, TX, USA, 2017; pp. 289–292.

146. Sullivan, K.J.; Zanotto, H.H.; Izzo, V.S.R.; Burke, C.C.; Awe, J.J. Revisiting Group B: Preliminary Results from the 2016 Excavations of Group B, Xunantunich. In *The Belize Valley Archaeological Reconnaissance Project: A Report of the 2016 Field Season*; Ebert, C.E., Burke, C.C., Awe, J.J., Hoggarth, J.A., Eds.; Department of Anthropology, Northern Arizona University: Flagstaff, AZ, USA; Institute of Archaeology, Baylor University: Waco, TX, USA, 2017; pp. 379–406.

147. Tilden, D.; Awe, J.J.; Slocum, D.L.; Zanotto, H.H.; Burke, C.C.; McKeown, A.; Jantz, L.M.; Helmke, C.; Can, J. The Structure A9 Tomb at Xunantunich, Belize. In *The Belize Valley Archaeological Reconnaissance Project: A Report of the 2016 Field Season*; Ebert, C.E., Burke, C.C., Awe, J.J., Hoggarth, J.A., Eds.; Department of Anthropology, Northern Arizona University: Flagstaff, AZ, USA; Institute of Archaeology, Baylor University: Waco, TX, USA, 2017; pp. 346–378.

148. Tilden, D.; Slocum, D.L.; Awe, J.J.; Sullivan, K. The 2016 Investigation of Structure A9 at Xunantunich, Belize. In *The Belize Valley Archaeological Reconnaissance Project: A Report of the 2016 Field Season*; Ebert, C.E., Burke, C.C., Awe, J.J., Hoggarth, J.A., Eds.; Department of Anthropology, Northern Arizona University: Flagstaff, AZ, USA; Institute of Archaeology, Baylor University: Waco, TX, USA, 2017; pp. 316–345.

149. Helmke, C.; Awe, J.J. Sharper than a Serpent’s tooth: A Tale of the Snake-head Dynasty as Recounted on Xunantunich Panel 4. *PARI J.* **2016**, *17*, 1–22.

150. Helmke, C.; Awe, J.J. Death becomes her: An analysis of Panel 3, Xunantunich, Belize. *PARI J.* **2016**, *16*, 1–14.

151. Martin, S. The Caracol Hieroglyphic Stairway. *Maya Decipherment J.* **2017**, *2017*, 1–13.

152. Watkins, T.B.; Awe, J.J.; Helmke, C.; Fitzmaurice, R. Classic Maya Palaces and their Roles within the Greater Ceremonial Center: Results from the 2017 Field Season at Xunantunich, Belize. In *The Belize Valley Archaeological Reconnaissance Project: Progress Report of the 2016 Field Season*; Ebert, C.E., Hoggarth, J.A., Awe, J.J., Eds.; Department of Anthropology, Northern Arizona University: Flagstaff, AZ, USA; Institute of Archaeology, Baylor University: Waco, TX, USA, 2017; pp. 333–356.

153. Feely, C. Game On: Investigations of Ballcourts 1 and 2 at Xunantunich. Master’s Thesis, Department of Anthropology, Northern Arizona University, Flagstaff, AZ, USA, 2019.

154. Austin, T. Examining Ancient Maya Resiliency at Xunantunich, Belize. Master’s Thesis, Department of Anthropology, Northern Arizona University, Flagstaff, AZ, USA, 2019.

155. Messenger, E.R.; Alvarado, A.I.; Burke, C.C. Excavations of a Terminal Classic Elite Plazuela at Xunantunich, Belize: Results from the 2018 Field Season. In *The Belize Valley Archaeological Reconnaissance Project: A Report of the 2018 Field Season*; Ebert, C.E., Walden, J., Hoggarth, J.A., Awe, J.J., Eds.; Department of Anthropology, Northern Arizona University: Flagstaff, AZ, USA; Institute of Archaeology, Baylor University: Waco, TX, USA, 2019; pp. 316–346.

156. Kováč, M.; Desprat, A.; Gayol, C.P. New Stucco Masks from Uaxactún: Interpretation, Conservation and Documentation of Extraordinary Preclassic Maya Art. In *Archaeology of Three Continents 2006–2011 (5 Years of the Slovak Archaeological and Historical Institute SAHI)*; Hulínek, D., Bonatz, D., Kováč, M., Eds.; Slovak Archaeological and Historical Institute: Bratislava, Slovak Republic, 2015; pp. 125–142.

157. Leventhal, R.M.; Ashmore, W.; LeCount, J.L.; Yaeger, J. The Xunantunich Archaeological Project, 1991–1997. In *Classic Maya Provincial Politics: Xunantunich and its Hinterlands*; LeCount, L.J., Yaeger, J., Eds.; University of Arizona Press: Tucson, AZ, USA, 2010; pp. 1–19.

158. Moore, A.F. Micro-Settlement Analysis in the Belize River Valley: Archaeological Investigations at Atalaya, a Formal Patio Group at Baking Pot. Ph.D. Thesis, Institute of Archaeology, University of London, London, UK, 1999.

159. Guerra, R.A. Cultural Heritage Management: Policies and Process in Belize, Central America. Master's Thesis, Public Archaeology, University of New Mexico, Albuquerque, NM, USA, 2013.

160. Awe, J.J. Cultural Resource Management in Belize. In *Cultural Resource Management: A Collaborative Primer for Archaeologists*; King, T.F., Ed.; Berghahn Books: New York, NY, USA, 2020; pp. 117–124.

161. BVAR Research Summaries. Available online: <https://www.bvar.org/forum/research-summaries> (accessed on 15 May 2020).

162. Awe, J.J. Linking the Past to the Future: The Renaissance of Ceramic Production in San Antonio Village, Belize. In *Future of the Past: Revitalizing Ancient Maya Ceramic Traditions in a Modern Maya Community* Exhibition Catalogue; Dowd Gallery: SUNY Courtland, NY, USA, 2016; pp. 6–9.

163. Donovan, J. Reinventing Maya Ceramics in Belize: The Future of the Past Project. In *Exhibition Catalogue*; Dowd Gallery: SUNY Courtland, NY, USA, 2016; pp. 1–3.

164. Donovan, J.; Awe, J.J. The Future of the Past: Revitalizing Ancient Maya Cultural Traditions in Modern Maya Communities. *NCECA J.* **2016**, *37*, 123–125.

165. Awe, J.J. Discovering the First Belizeans: Paleoindian and Archaic Hunter Gatherers, and the Ancient Maya of Belize and Central America. In *Readings in Belizean History*; Krohn, L., Salam, F., Eds.; Print Belize: Belmopan, Belize, 2004; pp. 1–16.

166. Awe, J.J. *101 Questions and Answers about the Maya of Belize*; Image Books; Belize: Belize City, Belize, 2005.

167. Awe, J.J. *Maya Cities and Sacred Caves: A Guide to the Maya Sites of Belize*. Cubola Books; Cubola Books: Benque Viejo del Carmen, Belize, 2006.

168. Awe, J.J.; Hoggarth, J.A. (Eds.) *Northern Belize Tour Guide Manual: Cultural Tourism Training Project*; Inter-American Development Bank and Institute of Archaeology, National Institute of Culture and History: Belmopan, Belize, 2012.

169. Awe, J.J.; Hoggarth, J.A. (Eds.) *Southern Belize Tour Guide Manual: Cultural Tourism Training Project*; Inter-American Development Bank and Institute of Archaeology, National Institute of Culture and History: Belmopan, Belize, 2012.

170. Awe, J.J. Now You See It, Now You Don't: The Trials and Tribulations of Settlement Survey at Cahal Pech. In *Belize Valley Archaeological Reconnaissance Project: Progress Report of the 1992 Field Season*; Awe, J.J., Campbell, M.D., Eds.; Department of Anthropology, Trent University: Peterborough, ON, Canada, 1993; pp. 1–9.

171. Awe, J.J.; Ramos, J.; Beardall, A.; Pleitez, G.; Batty, S. Cahal Pech Maya of Burns Avenue: A Report of Salvage Excavations in San Ignacio Town, Belize. *Res. Rep. Belizean Archaeol.* **2014**, *11*, 193–204.

172. Gould, K.A. Ecotourism under pressure: The political economy of oil extraction and cruise ship tourism threats to sustainable development in Belize. *Environ. Sociol.* **2017**, *3*, 237–247. [CrossRef]

173. Wallgrün, J.O.; Huan, J.; Zha, J.; Ebert, C.; Roddy, P.; Awe, J.; Murtha, T.; Klippel, A. Immersive technologies and experiences for archaeological site exploration and analysis. In *International Conference on Spatial Information Theory*; Springer: Cham, Switzerland, 2017; pp. 307–314.

174. Ardren, T. Where are the Maya in ancient Maya archaeological tourism? Advertising and the appropriation of culture. In *Marketing Heritage: Archaeology and the Consumption of the Past*; Rowan, Y., Baram, U., Eds.; Altamira Press: New York, NY, USA, 2004; pp. 103–113.
175. Magnoni, A.; Ardren, T.; Hutson, S. Tourism in the Mundo Maya: Inventions and (mis) representations of Maya identities and heritage. *Archaeologies* **2007**, *3*, 353–383. [[CrossRef](#)]
176. Hutson, S.R.; Herrera, G.C.; Chi, G.A. Maya heritage: Entangled and transformed. *Inter. J. Herit. Stud.* **2014**, *20*, 376–392. [[CrossRef](#)]
177. Walker, C. Archaeological tourism: Looking for answers along Mexico’s Maya Riviera. *Napa Bull.* **2005**, *23*, 60–76. [[CrossRef](#)]



© 2020 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).