

Archaeology under the canopy: Imagining the Maya of El Pilar

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Introduction

For thousands of years, countless locations on earth have been inhabited by productive societies and then ‘discovered’ by one or several heroic, mostly western, adventurers. These adventurers, whether they be diplomats, writers, surveyors or of another profession, eventually contract their artists or photographers to document their findings and advertise the knowledge to be gained, the experiences to be had, and the cultures to be witnessed at their newly discovered destination (cf. Castleberry 2003; Osborne 2000). Ancient America was exposed to these adventurers at a time when it was presumed that the New World was occupied by nothing but ‘savages’, denying the existence of great civilizations (Von Hagen 1973). Though sometimes misinterpreted, these adventurers revealed evidence of civilizations past and present, challenging the previous assumptions. Such truths, and sometimes tales, generally initiate preliminary and then rigorous scientific investigation, as with the Maya (Adams 1969). The development strategy for such a destination can then take many forms depending on a variety of geographic, socio-economic, and environmental factors (Honey 1999). For the Maya region of Mesoamerica, the scientific exploration and study evolved an archaeology-focused tourism model which is still dominating the region today



Figure 1: Central Maya Lowlands with El Pilar indicated

Starting in the beginning of the 20th century, Mexico's Yucatan developed Chichén Itzá with a focus on the monumental pyramids (e.g., Castaneda 1996). By the end of the century, each of the five countries (Mexico, Guatemala, Belize, El Salvador, and Honduras) that had an ancient Maya presence were all pyramid destinations (cf. Bawaya 2003-4; Brown 1999). What worked at the turn of the 20th century is still the vogue at the turn of the 21st century. This focus on the elite paints a glamorous

picture of the Maya, overriding the strong foundation of their agricultural base that fueled the magnificence of the Maya. Why is this foundation invisible to the tourist visitor, even though it surrounds them? This may not have been a pressing question in the 20th century, but as we experience the scarcity and limitations of our current natural resources, understanding alternative strategies is vital to the management and cooperation of humanity and the natural world, let alone our coveted tourism destinations.

In this chapter we will look at the standard tourism model for the Maya world, and alternative components to it, on a micro and macro level. On a micro level, we will consider how the model has shaped regional tourism consumption within the Maya context and impacted the sense of place for visitors and community members alike. On a macro level, we will entertain how this example of tourism's impact can help us better steward tourism's affect on global issues that cut across disciplinary boundaries. On both the micro and macro level we will reveal that interconnectedness is key for human and nature relationships in the context of development in general, and tourism in particular. The World Tourism Organization (WTO) states that:

At the start of the new millennium, tourism is firmly established as the number one industry in many countries and the fastest-growing economic sector in terms of foreign exchange earnings and job creation. International tourism is the world's largest export earner and an important factor in the balance of payments of most nations. Tourism has become one of the world's most important sources of employment... Intercultural awareness and personal friendships fostered through tourism are a powerful force for improving international understanding and contributing to peace among all the nations of the world. (WTO 2005)

In the Americas specifically, tourism today has a unique opportunity to acknowledge lost societies and civilizations, such as those of the Maya. We also have the opportunity in this specific case, to celebrate the gifts of the present day communities, of which varying proportions are of Maya descent, and the various landscapes of the region from coastal to forested ecosystems. Yet we argue that for this to be achieved, an alternative is required to the dominant tourism model that inspires much of the Maya tourism today. Our example is that of El Pilar, a major centre from 800 BC to 1000 AD, located in the lowlands of what is today Belize and Guatemala (Figure 2). El Pilar will aid us in addressing the following questions: First, what kind of values for conservation can be inspired by a place? Second, what kind of preservation of both nature and culture can exist hand in hand with flourishing tourism and what pattern of tourism consumption does this entail? And finally, what alternatives for tourism development are available for the Maya region?

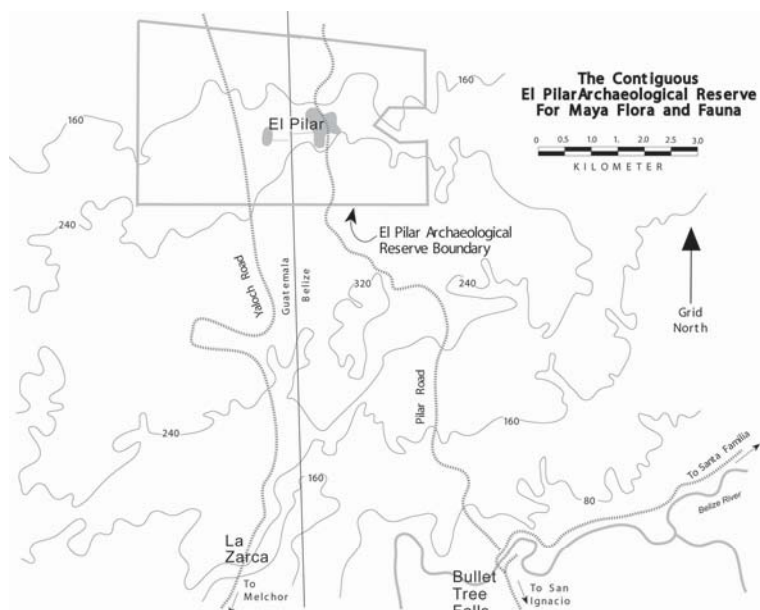


Figure 2: The El Pilar Archaeological reserve for Maya Flora and Fauna

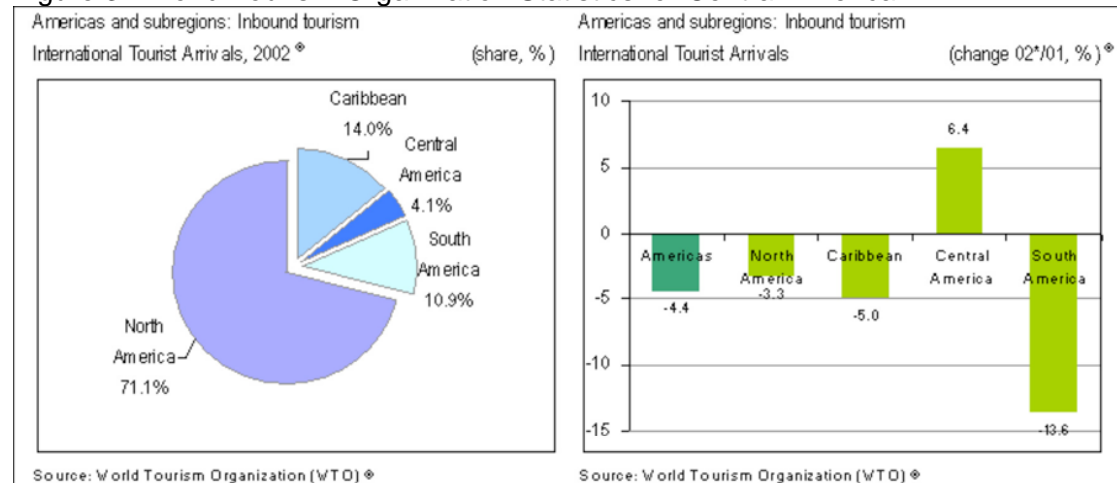
Present Day Tourism in Central America

Although the natural environment of the Maya region withstood millennia of occupation, today its forest is at risk (Mittermier et al. 2000). Contemporary agricultural strategies, population growth and movement, and human development programs that lack environmental consideration now threaten the rich, biodiverse forest that the Maya cultivated four millennia ago. Today, the International Union for the Conservation of Nature and Natural Resources (IUCN) reports that only one fifth of the Maya forest remains intact and 1300 species of plants are threatened. In addition, it is ranked among the tropical resources most at risk by (IUCN 2004). Alternative management strategies are needed to ensure that the culture and nature of the Maya have a chance to co-exist for many millennia to come (cf. Daltabuit Godás et al. 2000).

Over the course of the last three decades, the Maya forest has undergone a profound change. Concomitant with the population growth and expansive agricultural practices in the Maya region is the burgeoning tourism industry. Capitalized by tourism professionals, the Maya forest that encompasses the countries from Mexico south into Central America are sought after targets. Tourism is a means by which these targeted areas can enter into the global economy, in particular by featuring their historical, cultural, and environmental heritage. The ecological bounty that provided the Maya and other prehistoric cultures with their wealth is now a potential for an inviting adventure (Garrett 1989).

The most recent statistics demonstrate that tourism accounts for the growing proportion of income in the Central American region, where per capita income averages \$4100 per annum and the GDP ranges from under a billion dollars for Belize to over 23 billion for Guatemala (CIA 2005). This is also a region where approximately 50% of the population is rural and 50% are under 15 years of age. As the second world region in terms of international tourism receipts, the Americas earned US\$ 114 billion in 2002, US\$ 8 billion less than in the previous year (WTO 2005). While tourism is growing world wide, the Americas have been suffering a decline of four percent. In the context of this down turn, Central America, with little more than four percent of inbound tourism was the only sub region in the Americas to record an increase in tourism of greater than 6% (WTO 2005).

Figure 3: World Tourism Organization Statistics for Central America



Belize takes only an overall three percent share of Central America's tourism, yet posted the best result of the sub region by increasing at an astonishing rate of +14%. This is a rapidly growing market that is largely based on the expansion of cultural and nature-based tourism.

Tourism is the only product where the consumer must go to the source to consume it (LeLaulu 2003, see also Meethan, this volume), and this is ever apparent in the Maya world where major archaeological destinations, such as Chichén Itzá and Tulum in Mexico, anticipate in the order of a million visitors a year. As a result of their proximity to the cruise ship ports at Cancun, these cultural heritage sites are at risk of becoming overwhelmed (ICOMOS 1994, cf. Gurucharri 1996). Now within an hour's travel time from the comforts of a cruise ship's cabin, one can experience the rush of seeing the Castillo of Chichén – the temple-gaze takes hold of many a visitor before their attention span wanes. Prepared by the tourism industry's grandiose advertisements, many inquiring minds are put to rest and offered a spoon fed version of Maya history and a 'classic' photo opportunity. These destinations exist now and will continue to attract visitors, but newly targeted archaeological sites do not need to follow a similar destiny. For the continuum of visitors from the one-time trip to the inveterate traveler, there is a call for variety. The division of markets into niche specialties creates opportunities for new forms of tourism that are not dominated by a monocultural gaze. As globalization brings humanity together specifically through communications and commerce, there is an increasing responsibility to remember and represent our diverse pasts and cultural uniqueness. The 1964 ICOMOS Venice Charter further supports this need:

'People are becoming more and more conscious of the unity of human values and regard ancient monuments as a common heritage. The common responsibility to safeguard them for future generations is recognized'. (The Venice Charter, Preamble)

It is with these aims in mind, we see that the El Pilar project provides an opportunity to explore alternative possibilities. At El Pilar, there are two sister-community groups called Amigos de El Pilar, one based in Melchor, in the Petén of Guatemala, and the second in Bullet Tree Falls in Cayo, Belize (Awe 2000b; Ford in press). Together they have sponsored joint activities largely centered around the Fiesta El Pilar, an annual celebration of nature and culture typically held in Belize. The steady participation of local NGOs, *Help for Progress* in Belize and recently *Naturaleza para*

la Vida in Guatemala, lend their expertise to the implementation and ongoing promotion of the El Pilar Forest Garden Network, an encompassing program developed by El Pilar's core team. Equally, the protected-areas managers in both countries are involved and work to develop El Pilar within the context of their governmental agenda. Orchestrating the process and linking its many parts is the Belize River Archaeological Settlement Survey (BRASS)/El Pilar research program at the University of California Santa Barbara (<http://marc.ucsb.edu/elpilar/>) and the US based non-profit organization of Exploring Solutions Past: The Maya Forest Alliance (espmaya.org). Yet in order to fully appreciate the current tourism situation we first have to consider the evolving history of narratives concerning the Maya.

The Invention of Maya Tourism

In the middle of the 19th century, a pair of intrepid travellers by the names of John Lloyd Stephens and Fredrick Catherwood were among the first westerners to see the monumental architectural feats of the Maya and, in many ways, set the tone for future travellers. Their tremendous coverage of the ancient Maya monuments in Central America featured many of the now famous destinations: Palenque, Chichén Itzá, Tulum, Copan. Their travels were initiated on an errand of diplomacy, but Stephens' appetite was already whetted for the ancient monuments and they made it a point to cover the difficult terrain of the Maya world by mule, carts, horse, carriage, and even sedan chair. Catherwood, an architect, provided drawings with faithful detail (Bourbon 1999), for Stephens' picturesque prose (Stephens 1841, 1843). His lithographs provide a benchmark for appreciating the majesty and mystery the Maya architecture evoked. He depicted vine-wrapped structures covered by the forest canopy, protecting the remains of the ancient Maya civilization (Figure 4). Catherwood's perception of structural details, temples *en toto*, and the delicate hieroglyphs on monolithic stela were rendered in such clarity that the glyphs are able to be interpreted by scholars today. If Catherwood had an ability to accurately capture the elements of the glyphs, might we expect that the overall treatment of the temples and buildings were equally specific? If so, we must ask, what is the relationship between Catherwood's iconic views from the 19th century and the same structures today?

Figure 4: Catherwood's view of a Vine Wrapped Temple, Palenque



As the 20th century began, inquisitive visitors from foreign lands were out to find the fabled temples that had by then been published in traveller's tomes and new academic treatises that included views through artists' sketches to photographers' lenses (Catherwood in Stephens 1841, 1843; Maler 1928, see also Winter, this volume). One of these visitors was scholar, archaeologist, and adventurer Sylvanus Morley who visited the Yucatan before 1910 and set his sights on the investigation of the Maya. The creation of the Maya world was underway.

Scientific inquiry was the logical next step of exploration in the Maya region and Sylvanus Morley, newly signed on with the Carnegie Institute of Washington, facilitated this initiation process (School of American Research 1950; Harris & Sadler 2003). In the context of Morley's research agenda, a framework of Maya tourism was established. At that time, what lay beneath the crumbling surfaces of the monuments was unknown and the questions demanded excavations, exposing the collapsed and buried temples. Then, what followed were the analyses of the artifacts, investigations of the contemporary Maya and their languages, and descriptions of the epigraphy and iconography, not to mention studies of the region's botanical riches published consistently by the Carnegie Institute of Washington (e.g., Shepard 1964; Roys 1976; Lundell 1937; Thompson 1960). The Carnegie investigations canvassed the greater Yucatan of Mexico and the Petén of Guatemala, generating the foundation of Maya studies still used today. Their extraordinary contribution to understanding the Maya world began at a time when the population of the earth was only 25% of today's, when the tropical forests gave the impression of an uninterrupted canopy, and when water resources were still plentiful around the world. It was in this pioneering context that the Maya region was transformed from the unknown to one of the great mysteries of the world.

Morley saw Chichén Itzá in Mexico before WWI, but was only able to bring his research to fruition afterwards. Touted today as the most complete restoration of an archeological site in the Maya region, Morley spent twenty years of his life on Chichén. One of the main goals for the restored site was to attract visitors from all over the world. Morley and his benefactors accomplished this goal and catalyzed the awe-struck travellers' gaze upon Maya monuments. But the indigenous American narrative was imbued from the European perspective, laced with fanciful tales destined to become guidebook facts.

Compare Catherwood's drawing of Chichén's Castillo, Chichén Itzá's main temple-pyramid, to the one you see today (Figure 5) and you will find only a superficial resemblance. How were the present-day details of the Castillo evoked and what determined their inclusion? What then, was the evidence for the reconstruction of the temples and pyramids? The ICOMOS Venice Charter states that the integrity of the ancient architecture must be upheld and that one should not use imagination when consolidating monuments. Yet, in the case of Maya monuments and their mystique as a culture, many professionals have influenced the vision and the end results. The first impulse has been fueled by the international tourism industry and by the impression that *this, and only this*, is what tourists want to see on a visit to the Maya world. What we have therefore seen is the creation of a narrative of 'lost' civilizations and their 'discovery' by intrepid explorers (see also Winter, this volume). While this narrative does indeed capture an essential quality of the ancient Maya encounter, the exposed result raises the issue of authenticity (Fedick 2003). Is the moment of archaeological interpretation static or dynamic? Of course, this begs the questions of what is an authentic representation of time past (Orphal 2000), and how any given generation can place a value on a historical site and dictate its importance. The conservation of the authentic is an essential contribution to the clarification and illumination of the collective memory of humanity (National Archives and Records

Administration NARA 1994, Jokilehto 1995). Yet arguments concerning what is and what is not authenticity are far from being cut and dry. Wang (1999) suggests that authenticity can not only be defined in terms of absolute or 'museum' definitions, such as the narrative portrayed by Morley and others, but also at an existential level by each individual through their own intuition. This is exactly what the El Pilar Archaeological Reserve for Maya Flora and Fauna inspires and yet it has been called a mundane experience by critics because of its diversion from the classically accepted Maya 'norm' set out by Morley and others and epitomized by examples such as Chichén.

Figure 5: Chichén's Castillo 1830s (Fredrick Catherwood) and 2002 (Holley Moyes)



Let us look at this more closely and consider its impact on the authentic treatment of ancient Maya sites today and the potential expansion of current and future translations. Can the narrative created for Chichén Itzá, so long ago, be effectively challenged and supported by today's academic and tourism circles? The NARA Conference on Authenticity proclaimed that it is 'not possible to base judgments of values and authenticity with fixed criteria' (NARA 1994 unpaginated). We understand this dynamic and yet this is what has happened at many destinations in the modern Maya world to date.

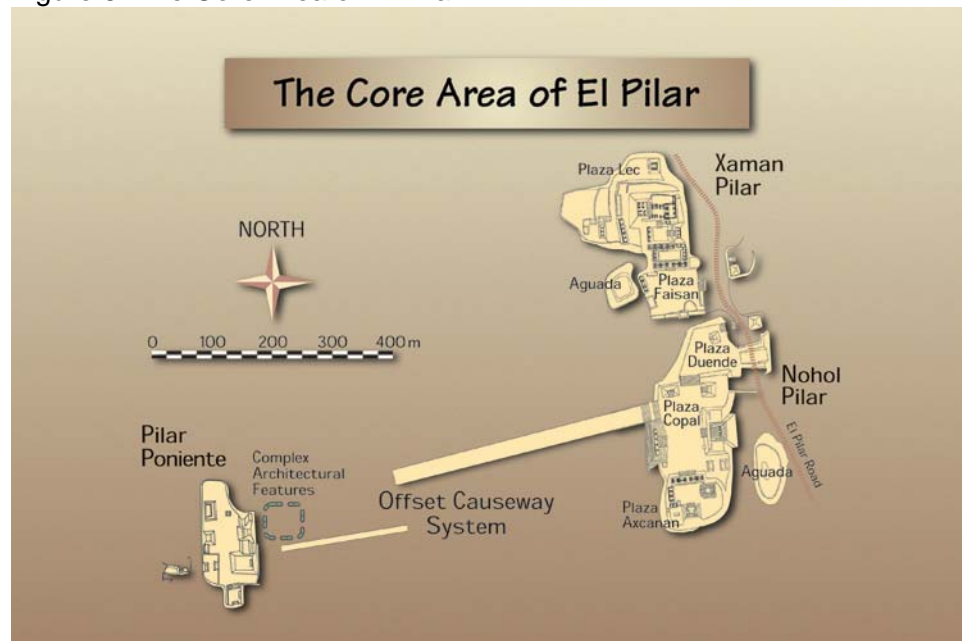
While celebrating the beauty of such sites and without casting any blame on their interpreters, let us consider that this cycle of representation can continue to evolve and perhaps better reflect the essence of Maya monuments, the past and present people of the region, and the exquisite yet threatened natural environmental context of the present day. If the established narrative is perpetuated, do we not threaten, discredit, and de-value the very thing we are trying to preserve and learn from? Our foundation of knowledge has greatly expanded over the past century. Isolated sites are now known and 'packaged' as stylistic clusters such as the Puuc Hills route (Yucatan Today, 2005), while stubborn temples protruding from the jungle canopy are recognized as the core of cities, and unknown origins have been transformed into detailed chronologies (e.g., Smith 1955 for Uaxactún; Willey & Sabloff 1975 for Seibal; Gifford et al. 1976 for Barton Ramie). Would not a diverse treatment of Maya sites increase tourism destination value, steady scientific inquiry, and general fascination?

El Pilar of the Maya World

Let us reflect on the example at El Pilar that has evolved beyond the 'fixed criteria' revered and maintained still today. Rediscovered in the 1980s, El Pilar is among the grand public monuments of the Maya region, covering more than 50 hectares of public monumental temples, palaces, and plazas, surrounded by a densely settled residential area that stretches across the border of Belize and Guatemala. Its history is not linked to the great explorers of the 19th century and emerged for development at the threshold of the 21st century at a time when we recognize that our earth's

resources are not only limited but also that those same scarce resources are the increasing focus of a growing tourism industry.

Figure 6: The Core Area of El Pilar



In 1989, the Maya region was promoted in the impressive October National Geographic debut of the La Ruta Maya, 'an all weather route that encircles the area' (Garrett 1989). This sweeping initiative was designed to link the five countries with ancient Maya presence – Mexico, Guatemala, Belize, Honduras, and El Salvador – to fortify their assets and compliment their development activities with an adventure circuit that featured the culture and nature of the region. The article extolled that La Ruta Maya included more cities than ancient Egypt, traditions and crafts that have survived three millennia, endangered plants and animals living in the wild, the longest barrier reef in the Americas, and underscores the economic and population pressures poised to threaten all of these treasures (Fedick 2003). With first hand knowledge, Wilbur Garrett (1989:435) reversed the perception of the fearsome jungle to 'ecological cornucopias that provided the ancient Maya with 'a good living.' In recognition of the legacy of the ancient Maya, Garrett (1989:438) envisioned La Ruta Maya as a regional collaboration across modern political borders presaging the potential foundation for the Peace Park concept. While this aspiration has yet to transpire, La Ruta Maya has morphed into Mundo Maya, a theme branded and adopted symbolically by all five nations with Maya sites. The Mundo Maya is a very large undertaking and yet its committed partners have the unprecedented opportunity to reveal a 5-nation tourism strategy and development process (International Development Bank 2003). The impacts of this bank-driven initiative will take years to unfurl, however it is an effort worth tracking as we all seek new, fresh, mutually validating models for improved Maya site representation and tourism consumption.

The Maya ancient monuments of El Pilar cover more than 50 hectares and now straddle the present political boundaries of two countries, incorporating three main architectural complexes, two in the eastern section (Belize) and one in the western section (Guatemala). There is an offset limestone causeway, a stone promenade, connecting the monuments in Belize with the monuments in Guatemala, which symbolically reminds us that the Maya forest is a regional asset managed by multiple interests.

El Pilar's physical location across an international boundary has been both good and bad news. Initially, as the vision for one El Pilar took shape from 1993-1995 its geography was perceived as an obstacle that would be difficult to surmount. Guatemala's territorial claim on Belize was a long-standing divide between the countries (IDB 2003). It was only in 1991, that Guatemala formally recognized the right of the Belizean people to self-determination, and in so doing established diplomatic relations between the two countries (Gobierno de Guatemala 2004; Government of Belize 2005). In 1996, with the support of regional treaties, such as the CCAD (Comisión Centroamericana de Ambiente y Desarrollo, www.ccad.ws), the two countries came together to examine the potentials of collaboration at El Pilar. This began a continuing sequence of meetings and encounters we refer to as the Mesa Redonda El Pilar (BRASS/El Pilar 2002, 2005). Through this process, the governmental stakeholders were involved and willing to protect El Pilar as one resource. In 1998 the protected areas were declared with statutory instruments in both countries and the contiguous boundaries were established and maintained since that date (Ford and Montes 1999). Today, the Institute of Archaeology in Belize supports caretakers at the site that serve as the entry point for visitors to El Pilar. In parallel, the Guatemala government, under the governmental wing of CONAP, (Consejo Nacional de Areas Protegidas), has endorsed the management plan for El Pilar (CONAP 2004).

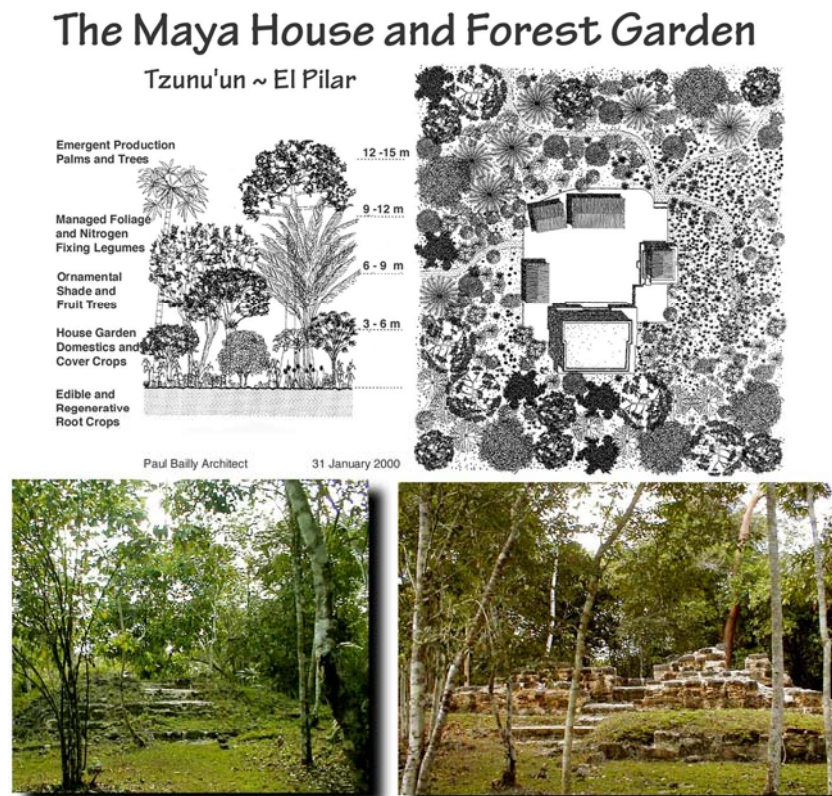
Integrated park management for The El Pilar Archaeological Reserve for Maya Flora and Fauna as one cultural and natural resource in two nations is fundamental to the long-term dynamic research and development design as well as to the reserve's future. The success of the El Pilar model is dependent upon the results of integrated, collaborative, and multidisciplinary programs and adaptive management activities with full participation of the officials, the community, and the experts that are involved directly or indirectly in maintaining the reserve on a lasting base (cf. Taylor-Ide and Taylor 2002).

When full archaeological investigations were launched at El Pilar in the early 1990s, vegetation of the tropical forest had taken over the site's temples, plazas, palaces, residential areas, and causeways. The feeling was startling. It was such a peaceful, un-manipulated space that it gave visitors a personal sense of discovery. Though the ancient site of El Pilar has since had extensive mapping and excavation, much of the archaeological excavations have been covered and backfilled. Visitors today can, therefore, experience a similar setting and feeling as the first archaeologists did when the site was rediscovered. This poses a challenge to the present day visitors however, a challenge to explore for themselves. This experience is daunting for some and exhilarating for others and yet everyone appreciates their time at El Pilar once made aware of what might rest beneath the looming 'mounds' of stone, humus, and vegetation. They are of course covered temples and palaces. This style of tourism destination model may be found in and among various international tourism sites, however, it is unique to the treatment of Maya archaeology sites. To consider the validity of this model in the context of the Maya region opens the door for variations to the 'Chichén' model, giving way to the fresh treatment and holistic stewarding of future Maya sites, preservation of their natural surroundings, and recognition of the neighboring communities which maintain and surround them.

When the Maya mystery is left to be divined by the visitor, whether international researcher or national tourist, it need not be carved out and handed over in a limited amount of time like many of the cruise-crowd experiences (see Figure 5). This is, therefore, a very different model of tourist consumption requiring active engagement and interpretation rather than a passive acceptance of presentations. Three important aspects help to maintain the Maya mystery and experience at El Pilar

(Orphal 2000). First, access to the site is best navigated by tourist agents and local guides, therefore management of tourism flow to the site can be monitored so as to maintain a reasonable carrying capacity at all times and in each season, wet and dry. The rainy season, June through December, for example, may have less traffic on the seven-mile dirt road up to the site. Second, once tourists reach the site, an established trail system helps guide their way and prevents them from diverting at will and damaging the monuments or flora. Third, the visitor is provided with an excavated, conserved, and partially reconstructed residential area, *Tzunu'un* – Hummingbird in Mayan– that represents a Maya household and serves as a tangible example of 'visible or uncovered ruins' within a natural-setting (Figure 7). How do tourists and visitors of El Pilar value these aspects?

Figure 7: The Maya house and Forest Garden at Tzunu'un, El Pilar



Let us consider the topic of 'value'. The values of a site can be 'aesthetic, historic, scientific, social or spiritual for past, present or future generations' (Australia ICOMOS Burra Charter 1988; Marquis-Kile & Walker 1992). The vision statement and management style at El Pilar reflect these sentiments (Ford 1998; Ford and Miller 1997; Rolex 2000). It is also founded on archaeological research regarding the evolution of the landscape, in this case the ancient Maya landscape, that acknowledges the clues to sustaining the complex habitats of today's Maya forest environment are embedded in Maya prehistory (Fedick and Ford 1990; Ford 1990, 1991, 1992, 1993, 2004). Ancient Maya settlement and local community patterns provide material evidence for the evolution of sustainable economies in one of the planet's last frontiers: the tropics. This plays out in the El Pilar Vision:

El Pilar Archaeological Reserve represents an innovative example of cultural resource conservation in relationship to the natural environment and to contemporary peoples. As the largest Maya archaeological site in the Belize River area, El Pilar is unique in its presentation of ancient daily life through household structures and

forest gardens, located in the shadows of monumental Maya architecture. This shared resource serves as a symbol of cooperation between Belize and Guatemala, and as a model of collaboration between the reserve and local communities and between the cultural and natural resource researchers and conservators. Involvement in reserve planning and management links the communities to their cultural heritage and encourages their social and economic development. Documentation and evaluation of this holistic approach to resource conservation will allow El Pilar to serve as a model for other important sites of world heritage (www.marc.ucsb.edu/elpilar).

Professionals and visitors have recognized El Pilar for its unique aesthetic, scientific, social, and spiritual value. The site's scientific value has been developed over the past several decades, given the various themes that the site encompasses, including archaeology, ecology, plant and animal biology, land use management, and tourism planning (Ford in press; Ford and Clarke 2000; Ford and Wernecke 2002). The site's location straddling the border between two nations (see Figure 7; Ford and Montes 1999; Gaunt and Estrada 1995; Golden 1996; Gomez 1997; Matadamas 1995; Topsey 1995), as well as its current and potential economic and educational opportunities, add tremendous social value to the site and its surrounding area (Ageton 2000; Awe 2000a, 2000b, 2001a, 2001b; Dye 1999; Ford 1996; Hartke 1995; Help for Progress 2004; Mancilla and Periera 2001; Seelhoff 1996; Shaw 2000; Tzul 2001; Wilhelm 2004).

The spiritual value of El Pilar cannot necessarily be seen by the naked eye in terms of sacred artifacts or ritual sites, however, one can sense the richness of the cultural activities that occurred at El Pilar and its evolving place in the contemporary landscape. It is also reflected in the visitor's comments in the caretaker's book. Often, it is in the simple residential areas that visitors are struck by the Maya's close connection to nature, animals, and their sense of the sacred (Ford 2001; Ford and Wernecke 2002). Overgrown gardens, once managed by local villagers, grow in scattered locations and can be appreciated from the trails (Friends for Conservation and Development 2000). Even with this support, El Pilar's inclusive 5,000 acres of monuments, flora, and fauna remain threatened by social and environmental impacts and suffer from a lack of economic support. Different forms of authenticity are not then mutually exclusive and can co-exist for different purposes and different audiences (cf. Nigh & Ochoa 1996). El Pilar offers a new narrative that embraces the entwined context of nature and culture in the Maya forest, providing a glimpse into the everyday aspects of ancient Maya life and its link to the contemporary peoples of the region.

Archaeology Under the Canopy

Archaeology under the canopy at El Pilar involves four main components: the tiered feral forest canopy (Campbell et al. in press), the current practice of forest gardening, the rich decomposing leaf litter on the forest floor, and the ancient monuments themselves. In fact, the shade of the forest canopy serves to maintain the stability of the ancient monuments, where exposure subjects them to accelerated deterioration (Larios and Ford 1999; Larios Villalta 2000; Perry et al. 2004). Forest gardening, at El Pilar and in the surrounding communities of the Maya forest, is simply an act of people treating the diverse forest as a useful and maintained garden. This old practice incorporates the management of the organic leaf litter as a chief soil enhancer. The effect that the tall canopy and the rich forest floor have on preserving the fertile landscape and monuments is augmented when forest gardening is integrated as a land management practice. This has been instituted at El Pilar slowly but surely, though its value has been questioned by those unfamiliar with the

practice. Forest gardening existed with the Maya and is still present in the cultural fabric and ecological practices in the surrounding communities of El Pilar today as well as worldwide in forest communities (Senanayake & Jack 1998; Fundacion Rescate del Bosque Tropical 2001). The concept, however, is so interwoven into the lives of present-day farmers of the Maya region who practice this method that they do not completely realize its tremendous value outside of their communities, both for humanity and the natural environment. The macro impacts are innumerable yet easily imagined. Forest Gardening alone could catalyze healthier populations worldwide simply by the diverse uses it provides from its plant matter.

The rich archaeological heritage at El Pilar, and many other undeveloped Maya sites, is matched by remarkable biodiversity. Together, these two facets offer a new way of perceiving the relationship between people, place, and history. Interviews with 18 forest gardens living adjacent to El Pilar, in 2004, revealed their dynamic, interactive relationship with nature by collectively identifying more than 350 useful plants in their gardens. The plants in their gardens are nurtured for medicine, ornaments, food, spices, dyes, poisons, construction, household products, toys, beverages, fodder and more. While many of the gardens reflect the global influence of the last 500 years, more than half of the plants are native and nearly all the dominant species of the forest are found in the gardens (cf. Campbell et al. in press). They identified 175 tree species, 140 shrubs, 135 herbs alone, not to mention the various vines, epiphytes, palms, ferns, and grasses. These forest gardeners show an astounding appreciation for ecological practice in their gardens and understand the need for conscientiously managing the landscape at El Pilar. They are equally aware of the complexities of the insects, birds, and bats when it comes to pollination as well as seed viability and dispersal (Atran 1993). These forest gardeners are the ultimate conservationists who recognize the importance of their role in the future of El Pilar.

Archaeology under the canopy at El Pilar creates a rich natural environment in balance with the memory of humanity's fragility and interdependence on natural resources. Further, it brings the traditional forest gardener back into focus as the manager of the canopy and rich under story. Archaeology under the canopy supports the nature/culture balance of Maya sites, but what do visitors think of this concept?

Presently, The El Pilar Archaeological Reserve's entrance gate is through Belize. The average visitor we speak of below is, therefore, a tourist who entered the Maya world via Belize. They may have experienced other Maya sites locally or in Guatemala and Mexico, or they may have just come from the coastal cayes and chanced on an inland expedition. Data from a survey conducted in the 1990s can provide a standard.

For decades, the archaeological destination in Belize was Xunantunich. The site is visible from the main Western Highway and has been a well-toured destination in Belize for decades. In a survey of foreign visitors to Xunantunich conducted by the Getty Conservation in 1993 (Belize Ministry of Tourism and Environment 1993), we know some basics about the travelers to the Maya world of Belize. Generally it was found that:

- Majority are from the United States
- Average income is \$ 70,000-90,000 (adjusted to 2004 US\$)
- 80% achieved university / graduate degree
- 54% did not know about Xunantunich and the Maya before arriving
- Nearly half had been to Belize before
- Would spend 2-3 days in Cayo, Belize
- Spent an average \$128-167 a day in Belize (adjusted to 2004 US\$)

- Wished to know more about Xunantunich
- Will visit Tikal, Guatemala

El Pilar emerged as a potential tour destination in the 1990s. In 1993, a caretaker was appointed at El Pilar, the reserve boundaries in Belize were established in 1995, and the statutory instruments of Belize and Guatemala were signed in 1998, formally creating the El Pilar reserve. Reviewing a selection of the comments in the El Pilar guest book from 1994-2001 are representative of the initial years at El Pilar and visitor's reactions to the diverse treatment of the site. Meanwhile the site was beginning to be discovered by intrepid travelers:

- ~ 'It was amazing to see a site in its natural state. We'll come back in 20 years and see what's happened.' Vicki and Jack Weisman, USA
- ~ 'A major site and a major step forward in bi-national cooperation.' John and Iona Howell, Forestry Dept./Natural History Museum of London
- ~ 'The five days I spent at this amazing site was the best way I could imagine to get in touch with the ancient spirit of the Maya.' Patricia Watson, USA
- ~ 'Pilar is a great place for lessons in herbs, temples, life.' Heleen Diks, Holland
- ~ 'Magical – I felt like a 19th century explorer deciphering temples from jungle hills.' Tim McGirk, Mexico
- ~ 'A unique and pleasing aesthetic that is both challenging and stimulating for the imagination.' Joseph Mowers, USA

These candid comments of visitors who encountered El Pilar reveal the struggle and the engagement of the experience. They also demonstrate that there is room for something different and a difference can be appreciated and admired.

A decade later, in 2004, the El Pilar Program team comprised of local and international stakeholders (Figure 8) conducted a survey as part of our two-week Think Tank expedition through Guatemala and Belize. The Think Tank traveled with 17 members including development professionals, donors, students, volunteers, local NGO partners, and archaeologists. Immersed in the El Pilar mission, the core El Pilar team members worked to reveal together the whole picture of El Pilar, expose the programs strengths and weaknesses, and open to new ideas and resources for moving the vision forward. Once at the site, a survey was conducted, completed by 13 Think Tank members and 13 local community members, and unearthed perceptions about El Pilar, its inherent value, and reactions to its archaeology under the canopy concept. A few facts are listed here:

- 100% of all respondents said that forest gardening could be successfully used as a trail and forest management tool at El Pilar
- 100% of local community members and 85% of Think Tank participants said that revealing *sections* of the monuments would enhance their experience
- 93% of local community members and 77% of Think Tank participants said that revealing the causeway would indeed improve bi-national collaboration at El Pilar
- 100% concurred that they would like to see El Pilar developed using the Archaeology Under the Canopy concept

Clearly, the reception of 'Archaeology under the Canopy' was positive. Both the first-time visitors and the community members embraced the concept of the forest as a garden and would like to see this developed. At Tzunu'un, the Maya house and forest garden, survey respondents were enthusiastic about the views of Maya household life. Foreign visitors, unfamiliar with seeing residential settings, were engaged and interested in understanding the concept of forest gardening. Still many, when confronted with the plazas under the shady canopy, would appreciate more architectural revelation while universally agreeing that the canopy should be maintained overhead. This is our vision (Figure 9). Curiously, the foreign visitors rated the Tzunu'un house and garden and main Plaza Copal as the highest priorities for attention while the community participants saw the ranger's station and causeway

as most important. This points out the issue of perspective and value when seeking common goals among diverse stakeholders.

Figure 9: Archaeology under the canopy: the vision for El Pilar.



Communication and Engagement with Stakeholders

As evident with regional resources, the creation of El Pilar relies on bilateral agreements between the two national governments. Yet, at a more localized level, there is also the consideration for the needs and interests of the community, which we can define as any group that has something in common and the potential to act together (Taylor-Ide and Taylor 2002:19). At El Pilar, this definition includes governmental leadership in both Belize and Guatemala, as well as people with vested interest in El Pilar from career agriculturists and farmers to village school teachers to tourism professionals and archaeological investigators. Due to the breadth of self-identifying stakeholders involved in the El Pilar model (see Figure 8), it has been increasingly significant to acknowledge all parties whether their involvement has been peripheral or central to the on-the-ground action. The most important aspect of acknowledgement should ideally come from within the community, not from outside influences and partner NGOs. Though this is still very much a habit in the making, our core team has seen the benefits of local stakeholder's acknowledging one another's contributions to the vision. This intimate level of acknowledgement however needs reinforcement annually to lead to the defining and redefining of each stakeholder's role and responsibility – from the small to the grand. Clear roles encourage accountability and inspire new stakeholders to get involved and bring their gifts towards a more inclusive shared goal and vision.

The Mesa Redonda El Pilar process created a basis for such dynamic collaboration, however this process was initiated by international interests with foreign monies. Although local stakeholders were invited to the meetings, and many attended and participated enthusiastically, there was still an underlying tone of the outside-in approach set into place which gave perceived power to the purse strings and/or political wills present instead of to the in-the-field motivations and assets. Despite the successes of the Mesa Redonda process through the mid-90's, the bottom-up community participation has waned and waxed in reaction to funding or lack thereof over the past decade of development. This has created fear and separation among El Pilar's stakeholders resulting in miscommunication and systems breakdown. The breakdown, however, has created an opportunity, allowing a new wave of leaders to step forward and ask the grounding question, 'what wants to happen here?' This

question is being asked among the various El Pilar stakeholders and the responses are coming from all corners – towards a shared vision.

As the barriers and challenges to stakeholder alignment are peeling away from the process this is allowing steady and renewed motivation to set the course for El Pilar's development. With a small amount of funding from Guatemala's USAID office coupled with a large amount of local skill and motivation, the El Pilar Forest Garden Network project is gaining footing in the border area of Belize and Guatemala – forming organically through right timing, right relationships, and affinity groups interested in forest gardening, technology, tourism, and environmental education. Doing what has always been done, the forest gardeners are the inspired heroes of this project and the hope of El Pilar's future, catalyzing the project's impact on local and regional conservation.

Could this project and the model evolving at El Pilar train and inspire a new kinship of tourism providers and visitors? With the research and garden-circuits coming out of the El Pilar Forest Garden Network, there is a lot of material that can be authentically shared with visitors in the intimate setting of people's homes and gardens. Imagine visiting an orchard on horseback, one with rich plants from grasses to herbs to vegetables to fruit trees, being told of each plant's uses and enjoying a meal from the garden's rich bounty. In such a context, each forest gardener can aspire to create their own presentation and divulge the very uniqueness of each garden. The knowledge and experiences within them will touch visitor's hearts and minds in a way that slows down time, creates thoughtful space, and entices cultural and natural connection. As El Pilar continues to be developed utilizing the forest gardening techniques, as well as revealing portions of its existing monuments in partnership with governmental authorities, can you imagine the visitor's experience? We can and we plan to provide the space for this unfolding.

Though this method may take time to evolve, given its organic nature, it does stand to keep dominator models at bay and allow local leadership to rise and define the process more and more. Tourism professionals and visitors alike may begin to see value in this 'process' orientation verses 'outcome' orientation. Shaded monuments, and archaeology under the canopy, is our envisioned outcome for El Pilar. This vision is compatible with and complementary to existing sites – offering a different experience for the visitors of the Maya region. El Pilar may inspire the explorer in each visitor, the piece in every person which craves to connect their interests and values to a place and its people, this is when tourism consumption shifts from being an experience of passive consumption to a reflexive experience. The old and new aspects of the site then have an opportunity to mirror their qualities for each other, the old is observed and admired; the new is provoked and inspired. By providing ample peace and quiet for new thoughts to emerge, El Pilar stands to encourage visitors to accept greater self responsibility at home and on tour, the connections between nature and culture can be experienced and applied elsewhere, from forests to cities, humanity just needs to remember how to take time to observe.

A Vision Forward

Natural and cultural heritage sites are an expanding theme in tourism and the narratives of sites within these contexts emphasize discovery, novelty, and adventure. Most often, however, such sites have been developed to spoon feed the visitor without challenge. Where is the interaction with the site? As these resources are becoming more scarce and increasingly at risk (Mittermeier et al. 2000; Nations 1999), the alternative is to encourage an engagement with our surroundings. Understanding El Pilar and other such sites worldwide, one can see the application of a very basic principle: instead of wishing for what you do not have, work with what

you do have and its value and assets will expand. This is our answer, a destination where the focus is less on the drama of the elite temples and more on the holistic value of the site and its people, past and present. In our current era of excess we are, paradoxically, experiencing that resources of the Earth are increasingly scarce (Pimm 2001; Wilson 1998, 2002), it is our responsibility to work with and appreciate what we have: our skills, our resources, our energy, our environment. Applying this idea to El Pilar, we have come to appreciate the natural phenomenon of archaeology under the canopy where the live forest ground cover of fallen leaves, tannins, and humus encase the monuments.

A century of development of the ancient Maya as worshipers at enormous temples at the expense of the whole society exaggerates the mystery and propels the distinctions that separate the rise and fall of the Maya from us. People constructed the temples and the people were thriving in the Maya forest as the civilization developed. Their mastery of the nature of the Maya forest and emergence as a civilization has been made something other than explicable. But if we are to learn from our collective human history so as to improve life as we know it and safeguard our planet for future generations, we need to engage with the Maya myth and collapse and not continue to separate from them and merely maintain our tourist's gaze. Consider this: it has taken humanity one hundred years to transform the verdant Maya forest of the early 20th century into a fraction of its coverage, putting at risk flora and fauna that abounded in ancient Maya art. And yet, when the ancient Maya thrived they supported no less than three times and, if archaeological assertions are believable, more than nine times the population found in the region today. We are in the 21st century and need to engage with our surroundings for it is all we have. It is time to ask the question, is there another way to depict the Maya and further appreciate their story? Our answer is resoundingly YES.

Ultimately, responsibility can lead a new kinship of tourism professionals and visitors to connect to their own personal narrative, their myth within the context of a strange land and other people across both space and time. A healthy future for humans, animals, and plants alike depends on our awareness of lessons learned from the past and practical applications of new solutions in the present – not tomorrow. Our future depends on this self and group level of responsibility. So what threatens our newly coined term of 'archaeology under the canopy' recognizing an age-old principle? Our reply - development activity wrapped in a promise of progress yet based on immediate returns. With global, regional, and local recognition and support El Pilar's inclusive model can be realized in our lifetime. Building this model into the regional Maya archaeological framework, the treatment of Maya sites can evolve and support greater diversity of visitors, educating humanity on behalf of the great Maya civilization for generations to come.

References

Adams, R. E. W. (1969) Maya Archaeology 1958-1968 A Review. In *Latin American Research Review* 4, 2, 3 - 45.

Ageton, C. (2000) *Breaking New Ground: Community Development at El Pilar, Belize*. MesoAmerican Research Center, UCSB

Atran, S. (1993) Itza Maya Tropical Agro-Forestry. In *Current Anthropology* 34, 5, 633-700.

Australia ICOMOS (1976) *The Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (Burra Charter)*. vol. 1997. Australia ICOMOS.

- Awe, E. A. (2000a) *Regional Community Action and the El Pilar Archaeological Reserve for Maya Flora and Fauna*. Help for Progress.
- Awe, E. A. (2000b) *Trans-Boundary Initiative for Cooperative (Joint) Management of El Pilar Archaeological Reserve for Maya Flora and Fauna and the Promotion of Community Based Ecotourism and the Development of Sustainable Agricultural and Forestry Practice in Belize*. Help for Progress.
- Awe, E. A. (2001a) *Progress Report: Creating a Livelihood at the Nexus of Culture and Nature*. Help for Progress.
- Awe, E. A. (2001b) *The Establishment of the Consultative Council and Initial Implementation of the Strategic Plan for El Pilar*. Help for Progress.
- Bawaya, M. (2003-04) Archaeotourism: Increasing Tourism and Knowledge of the Maya are the Goals of a Major Project at a Site in Belize. In *American Archaeology*, 7, 12-19.
- Belize Ministry of Tourism and Environment (1993) *Visitor Profile Xunantunich*. Ministry of Tourism and the Environment.
- Bourbon, F. (1999) *The lost cities of the Mayas: the life, art, and discoveries of Frederick Catherwood*. Abbeville Press, New York.
- BRASS/El Pilar Program (2002) *Adaptive Management in the Maya Forest: The Contiguous Parks at El Pilar*. Exploring Solutions Past: The Maya Forest Alliance.
- BRASS/El Pilar (2005) Mesa Redonda Process. BRASS/El Pilar Program <http://marc.ucsb.edu/elpilar/archives/archives.html>.
- Brown, D. F. (1999) Mayas and Tourists in the Maya World. In *Human Organizations* 58, 3, 295-303.
- Campbell, D. G., A. Ford, K. S. Lowell, J. Walker, J. K. Lake, C. Ocampo-Raeder, A. Townesmith and M. J. Balick (in press) The Feral Forests of the Eastern Petén. In *Time and Complexity in the Neotropical Lowlands*, edited by C. Erickson and W. Baleé. Columbia University Press, New York.
- Castaneda, Q. E. (1996) *In the Museum of Maya Culture: Touring Chichen Itza*. University of Minnesota Press, Minneapolis .
- Castleberry, M. (ed) (2003) *The New World's Old World: Photographic Views of Ancient America*. University of New Mexico Press, Albuquerque, NM.
- CIA, Central Intelligence Agency (2005) *The World Factbook* <http://www.cia.gov/cia/publications/factbook/>. Central Intelligence Agency.
- CONAP (2004) *Plan Maestro Monumento Cultural El Pilar En La Reserva De La Biósfera Maya*. Consejo Nacional de Areas Protegidas.
- Daltabuit Godás, M., H. Cisneros Reyes, L. M. Vazquez Garcia and E. Santillan Hernandez (2000) *Ecoturismo y Desarrollo Sustentable: Impacto en Comunidades Rurales de la Selva Maya*. 1a ed. Universidad Nacional Autónoma de México Centro Regional de Investigaciones Multidisciplinarias, Cuernavaca, Morelos.

Dye, L. (1999) Understanding the Maya: Their Rise, Their fall, Their Way of Life. ABCNEWS.com. www.marc.ucsb.edu/el Pilar/index.html

Friends for Conservation and Development (2000) *El Pilar Community Creek Trail: Life Returns to the Forest: An Interpretive Historical Trail*. Friends for Conservation and Development.

Fedick, S. (2003) In Search of the Maya Forest. In Slater, C. (ed) *In Search of the Rain Forest*. Duke University Press, Durham.

Fedick, S. L. and A. Ford (1990) The Prehistoric Agricultural Landscape of the Central Maya Lowlands: An Examination of Local Variability in a Regional Context. In *World Archaeology* 22, 1, 18 -33.

Ford, A. (1985) Maya Settlement Pattern Chronology in the Belize River Area and the Implications for the Development of the Central Maya Lowlands. In *Belcast Journal of Belizean Affairs* 2, 13 -32.

Ford, A. (1990) Population Growth and Development of Complex Societies: Theoretical Considerations for the Evolution of the Classic Period Maya. In Cameron, C. (ed) *Agriculture: Origins and Impacts of a Technological Revolution. Occasional Papers of the Archaeological Research Facility* (5), California State University, Fullerton.

Ford, A. (1991) Economic Variation of Ancient Maya Residential Settlement in the Upper Belize River Area. *Ancient Mesoamerica* 2(1):35-45.

Ford, A. (1992) The Ancient Maya Domestic Economy: An Examination of Settlement in the Upper Belize River Area. Paper presented at the *Primer Congreso Internacional de Mayistas*.

Ford, A. (1993) Variaciones Regionales de Antiguos Asentamientos Maya e Implicaciones Económicas Para el Area Superior del Río Belice. *Mesoamérica* 25:39-61.

Ford, A. (1996) Hidden Boundaries: The El Pilar Archaeological Reserve for Maya Flora and Fauna. In *Belize Magazine*, 14-19.

Ford, A. (ed) (1998) *The Future of El Pilar: The Integrated Research & Development Plan for the El Pilar Archaeological Reserve for Maya Flora and Fauna, Belize-Guatemala*. Bureau of Oceans and International Environmental and Scientific Affairs, Washington, D.C.

Ford, A. (1999) Using the Past to Preserve the Future. In *Discovering Archaeology*, 98-101.

Ford, A. (2001) El Pilar: Gateway Between Belize and Guatemala. *Washington Report on the Hemisphere* 21, 1-2, 4-5.

Ford, A. (2004) Integration among Communities, Centers, and Regions: The Case from El Pilar. In Garber, J. (ed) *The Ancient Maya of the Belize Valley: Half a Century of Archaeological Research*. University Press of Florida, Gainesville, FL.

Ford, A. (in press) Adaptive Management and the Community at El Pilar: A

Philosophy of Resilience for the Maya Forest. In Agnew, N. (ed) *Out of the Past, for the Future: Integrating Archaeology and Conservation*. Getty Conservation Institute, Los Angeles.

Ford, A. and Clarke, K. (2000) UCSB Maya Forest GIS 2000. Alexandria Digital Library www.alexandria.ucsb.edu/adl/

Ford, A. and Fedick, S. (1992) Prehistoric Maya Settlement - Patterns in the Upper Belize River Area - Initial Results of the Belize River Archaeological Settlement Survey. In *Journal of Field Archaeology* 19, 1, 35-49.

Ford, A. and Gerardo, N. (2001) *The Tzunu'un Forest-Garden Trail Guide*. 1st ed. BRASS/El Pilar Program, Cayo, Belize.

Ford, A. and Miller, C. (1994) Arqueología de Acción en la Selva: Creación de la Reserva Arqueológica de El Pilar, Guatemala-Belice. In *Utzib* 1, 7, 19-21.

—

1997 *Creación de la Reserva Arqueológica El Pilar en Guatemala y Belice*. Museo Nacional de Arqueología e Ethnología, Guatemala.

Ford, A. and J. A. Montes

1999 Medio Ambiente, Uso de la Tierra y Desarrollo Sostenible: La Reserva Arqueológica El Pilar para Flora y Fauna Mayas de Belice y Guatemala. *Mesoamérica* 37:31-50.

Ford, A. and D. C. Wernecke

2002 *Trails of El Pilar: A Comprehensive Guide to the El Pilar Archaeological Reserve for Maya Flora and Fauna*. First ed. Exploring Solutions Past: The Maya Forest Alliance, Santa Barbara, CA.

Ford, A. and T. Williams

1994 *Teo's Way*. Translated by A. A. Davies. Belize Ministry of Tourism and Environment, Belize.

Fundacion Rescate del Bosque Tropical

2001 *Manual Práctico de Forestería Análoga*. Rimana, Quito, Ecuador.

Garrett, W.

1989 La Ruta Maya. In *National Geographic*, pp. 442-479. vol. 176.

Gaunt, F. and A. Estrada

1995 Frontiers of Ecotourism. In *Santa Barbara Magazine*, pp. 47-52. vol. 21.

Gifford, J. C.

1976 *Prehistoric Pottery Analysis and the Ceramics of Barton Ramie in the Belize Valley*. Memoirs of the Peabody Museum of Archaeology and Ethnology, Harvard University; v. 18. Peabody Museum of Archaeology and Ethnology Harvard University, Cambridge, Mass.

Gobierno de Guatemala

2004 Discurso del Señor Presidente de la República, Licenciado Oscar Berger ante la 59ª Asamblea General de Naciones Unidas. vol. 2005. Government of Guatemala <http://www.guatemala.gob.gt/index.php/cms/content/view/full/415>.

- Golden, F.
1996 Archaeologist Brings Guatemala, Belize Together over Maya Site. *Coastlines*:24.
- Gomez, E.
1997 La Zona Maya, Un Patrimonio Conjunto. In *El Nacional*, pp. 42.
- Government of Belize
2005 Belize-Guatemala Relations. vol. 2005. Government of Belize
<http://www.belize-guatemala.gov.bz/>.
- Gurucharri, M. C.
1996 Fragile Forests and Trampled Temples: Nature, Culture, and Tourism in the Maya World. Paper presented at the Tourism Development and Landscape Changes, Bangkok, Thailand.
- Harris, C. H. and L. R. Sadler
2003 *The Archaeologist Was A Spy: Sylvanus G. Morley and the Office of Naval Intelligence*. University of New Mexico Press, Albuquerque.
- Hartke, J. A.
1995 Saving What We Visit. *HSUS News* (Fall):38-40.
- HfP
2004 *Forest Garden Network Workshop*. Help for Progress. Belmopan, Belize.
- Honey, M.
1999 *Ecotourism and Sustainable Development: Who Owns Paradise?* Island Press, Washington, D.C.
- ICOMOS
1964 The Venice Charter. www.international.icomos.org/e_venice.htm
—
1994 Charter of Cultural Tourism. vol. 1997. ICOMOS.
www.icomos.org/tourism_charter.html
—
1996 ICOMOS Declaration of San Antonio on Authenticity.
www.icomos.org/doc/san_antonio.html
- IDB
2003 INITIATIVE LAUNCHED TO PROMOTE SUSTAINABLE TOURISM IN MAYAN REGION OF CENTRAL AMERICA. vol. 2005. Inter-American Development Bank
http://www.iadb.org/NEWS/Display/PRView.cfm?PR_Num=10/03&Language=English
- IUCN (2004) Red List: Threatened Species. <http://www.redlist.org>
- Jokilehto, J.
1995 Authenticity: a General Framework for the Concept. Paper presented at the Nara Conference on Authenticity, Japan.
- Larios, R. and A. Ford

1999 *Huellas Antiguas en la Selva Maya Contemporanea.*

Larios Villalta, C. R.

2000 Criterios de Restauración Arquitectónica en el Área Maya. vol. 2005. FAMSI
www.famsi.org/reports/99026es/index.html.

Larios Villalta, R.

2000 *Lineamientos Para la Conservación y Restauración Aplicables al Sitio Arqueológico el Pilar.*

LeLaulu, L.

2003 Address to the Mundo Maya Development Presentation. Paper presented at the 16 Feb 2003.

Lundell, C. L.

1937 *The Vegetation of Petén. With an Appendix: Studies of Mexican and Central American plants--I.* Carnegie Institution of Washington Publication; no. 478. Carnegie Institution of Washington, Washington, D.C.

Maler, T.

1928 Bosquejo histórico del Petén-Itzá. In *Sociedad de geografía e historia e Guatemala*, pp. 204-210. vol. V. Anthropological Literature, Harvard University, Boston.

Mancilla, M. and M. Perieira

2001 *Estudio de Capacidad de Carga de la Reserva Arqueologica El Pilar para la Flora y Fauna Maya y Estimacion de la Capacidad de Atencion Turista en la Comunidad de Bullet Tree Falls.* Help for Progress.

Marquis-Kile, P. and M. Walker

1992 *The Illustrated Burra Charter.* Australian ICOMOS Inc. with the Assistance of the Australian Heritage Commission.

Matadamas, E.

1995 'Patrimonio Natural y Cultural - El Pilar Podria ser un Model de Conservacion en Centroamerica: Aunque no esta Extento de Riesgos'. In *El Universal*, pp. 1, 4, Mexico, D.F.

Mittermeier, R. A., N. Myers and C. G. Mittermeier

2000 *Hotspots: Earth's Biologically Richest and Most Endangered Terrestrial Ecoregions.* CEMEX, Mexico.

NARA

1994 The Nara Document of Authenticity.

www.international.icomos.org/naradoc_eng.htm

Nations, J. D. (editor)

1999 *Thirteen Ways of Looking at a Tropical Forest: Guatemala's Maya Biosphere Reserve.* Conservation International, Washington, D.C.

Nigh, R. and F. Ochoa

1996 Community Ecotourism and Organic Agriculture Sustainable Development for Maya Communities at Lake Miramar, Chiapas. Paper presented at the Workshop for the Evaluation of the Conservation of the Maya Forrest, San Cristobal de Las Casas, Chiapas.

Orphal, F. (2000) *Authenticity: How can we balance the need for conserving the authenticity and the significance of the site with other potentially conflicting values?* University College London Institute of Archaeology. Submitted to Essay.

Osborne, M.

2000 *The Mekong: Turbulent Past, Uncertain Future*. Allen & Unwin, New York.

Perry, T. D., M. Breuker, G. Hernandez Duque and R. Mitchell

2004 Interaction of Microorganisms with Maya Archaeological Materials. In *The Lowland Maya Area: Three Millennia at the Human Wildland Interface*, edited by A. Gomez-Pompa, M. F. Allen, S. L. Fedick and J. J. Jimenez-Osornio, pp. 175-192. Food Products Press, New York.

Pimm, S. L.

2001 *The World According to Pimm: a scientist audits the Earth*. McGraw Hill, New York, NY.

Rolex Award for Enterprise

2000 Cultural Heritage: Anabel Ford. Rolex Award.

www.rolexawards.com/laureates/home_assoc.html

Roys, R.

1976 *The ethno-botany of the Maya*. Institute for the Study of Human Issues, Philadelphia, PA.

SAR, S. o. A. R.

1950 *Morleyana: a collection of writings in memoriam Sylvanus Griswold Morley, 1883-1948*. School of American Research and the Museum of New Mexico, Santa Fe, N.M.

Seelhoff, I.

1996 *Maya-Steinwerkzeuge Made in El Pilar*. In *DAMALS: Vereinigt Mit Dem Magazin Geschichte*.

Senanayake, F. R. and J. Jack

1998 *Analogue Forestry: An Introduction* 49. Monash Publications in Geography and Environmental Science, Victoria, Australia.

Shaw, R.

2000 *Maya Forest Gardens Touted as Conservation Tool*. vol. 2000. National Geographic.

Shepard, A. O.

1964 *Ceramics for the Archaeologist*. Fifth ed 609. Carnegie Institution of Washington, Washington, D.C.

Smith, R. E.

1955 *Ceramic Sequence at Uaxactun, Guatemala*, pp. 2 v. vol. I. Middle American Research Institute Tulane University, New Orleans, LA.

Stephens, J. L.

1841 *Incidents of travel in Central America, Chiapas, and the Yucatan* 2 Volumes. Harper & Brothers, New York.

- 1843 *Incidents of travel in Yucatan* 2 Volumes. Harper & Brothers, New York.
- Taylor-Ide, D. and C. E. Taylor
2002 *Just and Lasting Change: When Communities Own Their Futures*. The John Hopkins University Press in association with Future Generations, Baltimore, MD.
- The Government and People of Belize
1992 *Designing Small Scale Developments*. Paper presented at the First World Congress on Tourism and the Environment, San Ignacio, Cay District, Belize.
- Thompson, J. E. S.
1960 *Maya Hieroglyphic Writing*. [3d] ed. University of Oklahoma Press, Norman, OK.
- Topsey, H. W.
1995 *Collaboration and Cooperation in Archaeology in Border Areas of Belize*. *Public Archaeology Review* 3(3):pp. 12-14.
- Tzul, A.
2001 *1st Meeting of Farming Communities in the Maya Forest for the Design of an Agroforestry Model - El Pilar: Retrieving Old Traditions*. Help for Progress.
- Von Hagen, V. W.
1973 *Search for the Maya: The Story of Stephens & Catherwood*. Gordon & Cremonesi, London.
- Wang, N. (1999) *Rethinking Authenticity in Tourism Experience*. In *Annals of Tourism Research* 26, 2, 349 – 370.
- Wilhelm, K.
2004 *Die Schönheit des Wildwuchses*. In *Frankfurter Allgemeine Zeitung*, pp. R5, Frankfurt.
- Willey, G. R. and J. A. Sabloff
1975 *Excavations at Seibal, Department of Peten, Guatemala*. Peabody Museum of Archaeology and Ethnology Harvard University, Cambridge, MA.
- Wilson, E. O.
1998 *Consilience: The Unity of Knowledge*. Vintage Books, New York, NY.
- 2002 *The Future of Life*. Alfred A. Knopf, New York, NY.
- World Tourism Organization
2005 *Why Tourism?* www.world-tourism.org/aboutwto/eng/menu.html
- World Tourism Organization
2005 *Facts and figures*. www.world-tourism.org/facts/tmt.html
- Yucatan Today (2005) *Puuc Route*. <http://www.yucatanoday.com/destinations/eng-puuc-route.htm>

Figures

Figure 1: Central Maya Lowlands with El Pilar indicated

Figure 2: The El Pilar Archaeological reserve for Maya Flora and Fauna

Figure 3: World Tourism Organization Statistics for Central America

Figure 4: Catherwood's view of a Vine Wrapped Temple, Palenque

Figure 5: Chichén's Castillo 1830s (Fredrick Catherwood) and 2002 (Holley Moyes)

Figure 6: The Core Area of El Pilar

Figure 7: The Maya house and Forest Garden at Tzunu'un, El Pilar

Figure 8: El Pilar Stakeholders

Figure 9: Archaeology under the canopy: the vision for El Pilar.