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Different Ways of Knowing and a Different Ways of Being: On a Path to Reawakening Legacy of the Maya Forest

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Abstract: Archaeological projects are in a special position to create unique partnerships, with shared goals and intentions, to development Maya anthropological archaeology. This narrative presents an education outreach project in archaeology invigorated with local collaboration. When priorities of active archaeological projects formally include resident community participation, new horizons and accomplishments are achieved. Local and international interests in heritage and cultural traditions create the platform for interactive relationships and identification of common ground. Together, our experience recognizes four educational pillars that revolve around ancient Maya heritage and the fundamental Maya forest garden. Centered on the protected area of the El Pilar Archaeological Reserve for Maya Flora and Fauna, El Pilar and forest gardens are celebrated at the urban Cayo Welcome Center, practiced at the active outfield *Chak Ha Col* forest garden, and taught at the rural *K'anan K'aax* School Garden. As our experience demonstrates, community partnerships require specific elements of acknowledgment including a valued tangible heritage, a formal information outlet, an education link, and an honored cultural tradition. Together, these provide fertile ground for cultivating collaborations in the Maya region and across the world.

Keywords: archaeological heritage; education outreach; community participation; culture and nature Conservation

1. Introduction: Education Partnership Opportunities for Maya Archaeology

Developing a roadmap for archaeologists and community members to become partners is complex yet very worthwhile. Local community members have experiences, naming conventions, and conceptions of important landscape features that archaeologists must engage with to engender inclusive understandings of the past and shared heritage values for the future [1]. Improved social and environmental well-being are common goals for those dedicated to the preservation of cultural heritage, and archaeologists are in a position to bridge social, political, and economic sectors by forming partnerships to achieve these goals. Partners include the governments that authorize projects through permitting processes, the local communities within which—and the actors with whom—archaeologists work, and the global academic society that is the context for research. The decision to partner with the community must be a priority [2,3].

Short-term archaeological research projects face great challenges in the arena of community engagement, while projects that plan for long-term investment in specific areas will be better positioned to build partnerships. These can include, but are not limited to, engaging with tourism, working

with non-profits, collaborating with education programs, and building creative enterprises based on confidence and trust that can benefit all parties. We recognize four essential elements to building a community partnership: (1) a specific, valued tangible heritage; (2) a formal information outlet; (3) an active education link; and (4) an honored cultural tradition. This paper reviews the last decade of the El Pilar Project's community outreach programs, carried out in the context of our ongoing research (Figure 1) and collaborations, to expand participation in Belize and the greater Maya forest.



Figure 1. Location of the Central Maya Lowlands with El Pilar and Nearby Sites Indicated. Credit: MesoAmerican Research Center.

Honoring the Maya forest legacy requires reconnecting master forest gardeners with their communities and the youth, who can experience the Maya forest as a garden for the first time. We realize how everyone can play a part in encouraging biodiversity, enriching soil fertility, conserving water, and feeding themselves even as they help shade the landscape to reduce the impacts of increasing temperatures due to climate change. Our education outreach program builds from what we view as four pillars of the El Pilar model: (1) the protected El Pilar Archaeological Reserve for Maya Flora and Fauna; (2) the urban Cayo Welcome Center; (3) the outfield *Chak Ha Col* forest garden of Master Gardener Narciso Torres; and (4) the rural *K'anan K'aax* School Garden. Our joint efforts celebrate the intimate local knowledge of traditional Maya farmers and pursue creative outdoor education opportunities to explore the nexus of culture and nature [4].

The New World tropics are hotspots of biodiversity, and the Maya forest stands second only to the Amazon in this respect [5]. Biological and cultural diversity in the Maya forest, often discussed in terms of the creation of protected conservation areas by contemporary governments, can be traced to the forest management practices of the ancient Maya [6–8]. Recognizing the Maya have their origins in their forest environment opens a world of possibilities for understanding the beneficial impacts of human actions [9]. The environment itself is the wealth untold of the Maya forest, where the dominant plants all are useful for food, medicine, construction, utensils, and even toys and ornaments, not to mention a habitat for the animals [10,11]. Ancient Maya culture was sustained by an alliance between people and their landscape, which is worth recovering to build creative livelihoods for contemporary and future inhabitants of the tropics.

Traditional practices demonstrate connections between people and natural cycles of plants and animals [6,12]. Forest gardeners, who have grown up in the tropical landscape, know the importance of human relationships to the earth and the role these relationships play in maintaining health and wellness. They are conservationists who protect water and soil while maintaining biodiversity and supporting their families with food and medicine [13]. Our partnerships link the international academy

to local activists and forest gardeners to explore past solutions to contemporary challenges. Our broader vision includes an education network that illustrates the Belize national motto *Sub Umbra Floreo*—Latin for “Under the Shade We Flourish.” These partnerships provide the foundation for conservation and development strategies that promote a sustainable future. The people of Belize know the inherent value of their forests and gardens, and our project seeks to foster an explicit appreciation of the native landscape.

We see that the greatest threat to the Maya forest today, and its flora and fauna, is the loss of traditional farmers and their intimate ecological knowledge, which carries greater relevance as we move forward in today’s climate. To address this alarming trend, we have elected to invest in conservation and development practices that support the forest and its people. We provide a base for engaging Belizeans with their vital landscape, bringing out and making public the intrinsic values recognized by all. The enduring environmental legacy of the ancient Maya provides a blueprint for addressing issues of climate change, water conservation, soil fertility, and human well-being. Reconnecting and reawakening the people of Belize to their environmental heritage is our primary aim.

2. Background: Passing on the Legacy

The Maya forest is among the most diverse in the world, yet it is threatened by Western farming practices. Temperatures have risen more than 2° C and the global climate crisis is evident in quixotic and unpredictable rainfall patterns. Monocrop farming with chemicals is undermining the polycultural traditions that benefit farming families and the entire ecosystem. To reverse these disturbing developments, we see investment in conservation practices from local traditions as integral to support the forest and its people into the future. The time-honored skills and knowledge of the forest gardeners promise a future of prosperity and sustainable development [6,13]

The landscape of the upper Belize River, home of the ancient Maya of El Pilar and the diverse community of Cayo, Belize today, provides an example of the challenges facing the world. Where 50% of the community occupies rural areas and an equal proportion of the population is under 15 years of age, the relationship between population and environment is on the cusp of major change. Population estimates for the ancient Maya are higher than that of current populations in the same area. There is a growing need to investigate traditional land-use strategies and the viability of food sovereignty that has only intensified because of the Covid-19 pandemic. The El Pilar education outreach model is designed to awaken the community to the potentials of their landscape and revitalize the conservation ethic embedded in local traditions.

El Pilar was first explored in 1983 as part of the Belize River Archeological Settlement Survey, an archaeological project in the Cayo District of western Belize. Initial research was focused on survey and test excavations, examining the relationships between settlement and environment [14,15] and laying the foundation for appreciating traditional Maya land use. Investigations of looter’s trenches at El Pilar were conducted in 1986 [16], and full attention to the construction chronology of El Pilar’s monuments proceeded from 1993–2004. Coincident with the fieldwork was the development of the protected area in Belize and Guatemala [17,18] and its management plan, which highlights community participation [19,20]. Research in Belize and Guatemala continues with citizen scientists and community partners documenting ancient settlement and vegetation with the aid of cutting-edge Lidar technology [4,21].

Education outreach and community collaborative partnerships developed out of the archaeological research program in Belize and Guatemala directed by Anabel Ford (AF) [2,3,22,23]. As interest in the creation of a protected area around El Pilar increased, the local Cayo Area Representative Daniel Silva submitted a proposal for the boundaries of a proposed archaeological reserve. The archaeological team inaugurated the Fiesta El Pilar, cosponsored with government archaeologists, to expand community outreach through an annual, accessible event. The Fiesta El Pilar, initially dedicated by Father Richard of the Santa Familia Monastery—a long-standing Catholic institution in the area—spanned a decade and drew as many as 2000 celebrants with music, performances, and educational activities. The success

of this community-based and supported celebration led the Cayo Belize Tourism Industry Association (BTIA), under presidents Godsmen Ellis and Bobby Hales, to invite AF to apply for funding that would be used to create The El Pilar Archaeological Reserve for Maya Flora and Fauna. The Directors of the Non-Government Organization Help for Progress (HfP), Elias Awe and Rick August, supported the management planning process for the creation of the reserve. HfP brought in Anselmo Castañeda and his wide conservationist connections as a key partner to integrate the essential community participation component into an inclusive planning process. This process marked the beginning of crucial collaborative work with traditional forest gardeners that forms the link from past to present.

At the same time developments at El Pilar were moving forward, Cynthia Ellis Topsey (CET) was pursuing a career in rural development and building expertise in community organization in Belize. To expand her objectives, CET accepted Ford and Carnegie Foundation fellowships to spend two years at the Institute of Social Studies in the Hague, returning to Belize as her nation gained independence. As a community activist focused on rural development, CET was well positioned to work across Belize, where her leadership skills were acclaimed. She was selected to participate in a four-year Kellogg Foundation World Community Leadership program that honed her leadership skills and expanded her global network. Later, through her diplomatic work in the Caribbean Community and Common Market (CARICOM) focused on women, youth, and community development, she became aware of the Duke of Edinburgh Award and began to fiercely advocate for this program. In Belize, CET continues to work with both rural and urban communities. Her certification as a Supreme Court Arbitrator and Mediator helps in assisting with many controversial issues among the villages and towns.

The credentials of AF and CET, and their overlapping but complementary networks, made a convergence of their work both desirable and inevitable. CET's father, Godsmen Ellis, was involved with the El Pilar project through BTIA, and AF had worked with CET's husband, Harriot Topsey, when he was Commissioner of Archeology for Belize. CET was involved with a network of development NGOs at the same time AF was working with HfP. While AF was relying on Dr. Joseph Palacio of the University of the West Indies for community development input, CET—a friend and colleague of Palacio—was active in community development. CET even lived next door to Anselmo Casteñeda, the important collaborator with AF. Both CET and AF have connections in Belize and in international circles, both are focused on the great potentials of the Maya forest, and both see opportunities for positive change.

The meeting that set all in motion was stimulated by Israel Rivera, from Santa Familia village in Cayo, who requested CET's support with the forest gardeners' organization and insisted that she meet AF. Years ago, CET set out to learn the legacy of her late husband Harriot Topsey, an Archeological Commissioner of Belize and enthusiastic supporter of the establishment of the El Pilar Archaeological Reserve for Maya Flora and Fauna. Topsey was particularly devoted to developing links between people and plants and mentoring his archaeological team, and he was dedicated to educational outreach across Belize. Since his death in 1995, CET and their children attended the Belize Archaeological Symposium to engage with his colleagues, and AF was one of these. This encounter of listening, learning, and sharing was the beginning of two women from distinct backgrounds walking down the same path. Words like yin-yang, serendipity, enigma, and dynamic cannot adequately capture the power of this relationship, which has propelled El Pilar's education outreach to new heights.

A recognized community activist, CET sees herself as a mother of five children, with 17 grandchildren and counting. Her commitment to the next generations is intertwined with fulfilling her husband's dream of a brighter future for all children. She found AF's concept for El Pilar exciting, discovering the wealth untold in the dominant plants of the Maya forest [11] after seeing them represented at the *Kānan K'aax* School Garden in Santa Familia. The recognition that the world is a classroom further validates the work of forest gardeners, as Harriot Topsey certainly knew. CET found the stories from community members about forest gardens nothing less than revolutionary and could hardly contain herself; like the woman at the well, she went about sharing the good news with everyone, including the media.

CET is the Champion of the Duke of Edinburgh Award for Belize (DoE-Belize, intaward.org). This is an informal education program, established by the British Royal Family and aimed at promoting youth apprenticeship, which challenges participants to engage in physical recreation, learning new skills, voluntary service, and adventurous journeys like those she and Harriot shared. The DoE-Belize objective to build valuable life lessons of leadership, teamwork, and communication provides an ideal fit for the El Pilar model and is synchronized with our education outreach program. Both programs provide education themes that complement each other formally and informally, and both entities draw on the natural creativity of youth to enhance their preparation for the world.

Balancing the free flow of CET, AF is an archaeologist trained in the academy with a fierce commitment to integrating disparate views of concrete topics. Ever an idealist with hopes for a viable future, she is open to different ways of knowing. AF strives to understand the diverse disciplines that describe and interpret the Maya forest: anthropology, archaeology, geography, geology, botany, biology, agriculture, and the traditional practices of Maya forest gardeners. The core of AF's archaeological research explores the settlement and environmental patterns that are the heritage of the Maya forest in Belize, Guatemala, and Mexico. AF asks, If economic botanists say the Maya forest is a garden, and if agroforestry studies demonstrate that the milpa cycle is in sync with natural cycles, what can this teach us about conservation and management? In this line of questioning AF and CET find common ground.

Together, we need not go so far afield. Local forest gardeners teach the lessons of the wealth untold in the forest, and by apprenticing with these heroes, we can learn from their daily practice that demonstrates how under the shade we flourish. We can observe how they conserve water and moisture with shade, build soil fertility with organic matter, reduce erosion with land cover, and manage land use to reduce temperatures. These keen observation skills are what we value learning from forest gardeners, and we leverage this opportunity to share their knowledge with the world.

After forming this partnership, CET reached out to the University of the West Indies. This led to an invitation for Master Forest Gardener Narciso Torres to visit a seemingly impoverished community in Belize City. CET will never forget the excitement as Torres showed community leaders the potential of the plants all around them. This relationship led to United Nations Development Program (UNDP) funding for an urban gardening project to help build food sovereignty in Belize City, which transported the imagination of the forest garden from the rural "bush" to the city.

Diverse initiatives have blossomed from these initial efforts. Our education initiatives thrive through relationships from near and far, but they have always been facilitated by walking the same path together. We developed workshops that trained teachers by building on their ways of knowing, using the methodology of song, dance, and storytelling to celebrate, to honor, and to heal. Each teacher tells the story differently but converges on the mission of revealing the wealth untold. This creates an appreciation among people from all walks of life to become aware of their inherent knowledge. Engagement with indigenous wisdom of the Maya, Garifuna, Kriol, and Mestizo is in line with the new education curriculum for Belize. Rene Villanueva, founder of LoveFM, supported the workshops, and used his powerful media voice to promote a wider appreciation for nature and the Maya forest.

Bringing together the resources and networks of two women as they explore their one path is experiential and organic, evolving naturally from the local setting of Belize, and combining complementary networks in a most phenomenal way. Community organization and mediation skills fall in the domain of CET, while understanding the ancient Maya forest is the province of AF. The networks run deep and wide, with CET as a native Belizean and AF as international Mayista. The uniqueness of these combined assets energetically propels the project forward. Together, these two forces have met the challenges, the ups and downs, steering a course they share to a world of possibilities.

The foundation of the four pillars of El Pilar is the forest garden. We learn to trust the reliability of the forest gardeners' knowledge of the landscape, predicting when it will rain, finding the cure for the bruise, collecting repellent for bugs, and locating water. We honor their ability to perceive where, when, and what to plant. In these times we can depend on the capacity of the traditional forest

gardeners who understand the nuances of weather and terrain. This continues to be an education for all of us, especially for the youth who search for enterprise, showing a way to foster a new future for the planet. We transcend regional borders as more people from around the world come to study with the forest gardeners.

3. Materials and Methods: The Four Pillars of El Pilar

This discussion comes at a significant historical moment to capture the treasures of traditional Maya knowledge and resources for the world. We need to evaluate the role of humans in the caretaking of the environment, which has reached a critical threshold amid growing populations and changing climate. Education is fundamental and we use the Maya forest as an example. The El Pilar education outreach program includes four distinct and interconnected pillars in the Cayo District of Belize: the ancient Maya site El Pilar, the Cayo Welcome Center, the active forest garden *Chak Ha Col*, and the Santa Familia Primary School Garden *Kānan K'aax* (Figure 2). The pillars provide a mosaic from the rural to the urban with herbs, shrubs, and trees that invite different ways of knowing and being.

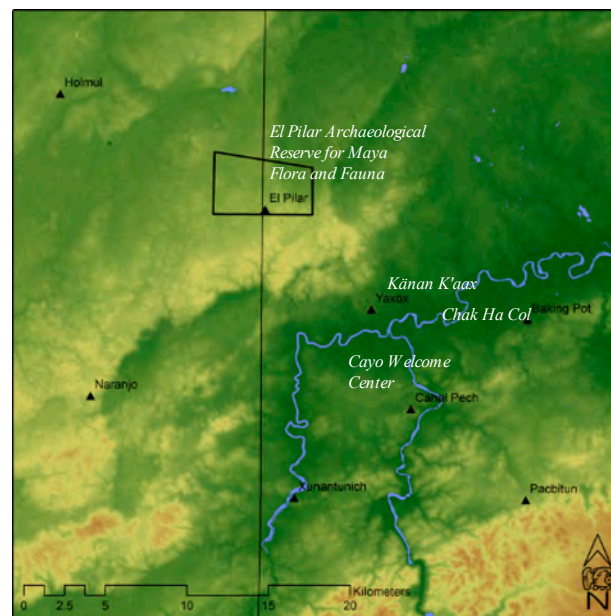


Figure 2. The Local Area Locating the Four Pillars of El Pilar. Credit: MesoAmerican Research Center.

The first pillar is the archaeological site of El Pilar [23], the umbrella which shelters and preserves Archaeology Under the Canopy [24] in the rainforest and a model showcasing connections among living things. Unique in the Maya world, El Pilar is the only archeological site maintained for tourism that explicitly frames the temples and pyramids in the context of the forest (Figure 3). Plants, animals, and people converge into a tapestry that highlights the past and present while nurturing a promise for the future. This is where you can walk with citizen scientists, forest gardeners, and naturalists, and learn to identify the 20 dominant plants of the Maya forest [11]; where you can see howler and spider monkeys maneuvering in the tree tops [23], rejoice in the soaring parrots at sunset, and learn how to recognize the tracks of animals like the jaguar. The model forest garden in the midst of the monuments invites us to appreciate the cultivated values of the Maya forest [25].



Figure 3. The Unique Archaeology Under the Canopy at the Tzunu'un Maya House at El Pilar. Credit: Macduff Everton.

The interconnectedness is significant in the second pillar at the Cayo Welcome Center, which extends the experience to take an imaginative look at El Pilar. The evocative images, engaging videos, and scale model of the site increase understanding of the gifts of culture and nature. We learn with fascination about the interwoven flora and fauna and the potential of fortifying food sovereignty so relevant to society today. Archaeology Under the Canopy [25,26], the singular framing of work at El Pilar, honors traditional farmers—the *milperos* and milpas they sow—and enlists visitors to renew and restore the symbiotic relationship between humans and nature (Figure 4).



Figure 4. Zacarias Quixchan in his Polyculture Milpa. Credit: Macduff Everton.

The third pillar—the active forest garden *Chak Ha Col*—captures the synergy between culture and nature by showing cooperation with, rather than an attempt to tame, natural cycles [27,28]. The garden displays the diversity of intertwining annual crops with perennial trees even as it is surrounded by the expanding monocrop fields of Western-style agriculture (Figure 5). Here one experiences the opportunity to harvest beans, appreciates the importance of water for animals, and learns about seasonal behaviors of birds. The limitless possibilities of the forest show its resilient capacity to provide food, medicine, shelter, shade, aesthetics, and habitats shared with animals.



Figure 5. Blooming Bukut (*Cassia grandis*) Guards the Edge of the *Chak Ha Col* next to a plowed field ready for a monocrop of Beans. Credit: Narciso Torres.

The *Kānan K'aax* School Garden, our fourth pillar, is a place for an important yet enigmatic experience of the Maya forest (Figure 6). It represents the intentional passing of the Maya legacy to future generations, the children and their children, ad infinitum. Through this garden, we invite everyone to consider the challenge that no child be left indoors [22,29]. Even with the new reality caused by the Covid-19 pandemic, creativity and innovation can prevail. There is unity in isolation and connectivity in separation that creates a world of inclusion. Nature teaches us how to care and this is one of many lessons from the school garden.



Figure 6. Alfonso Tzul Sharing with Students and Teachers at the *Kānan K'aax* for Education Week. Credit: MesoAmerican Research Center.

Sharing these treasures with the local and global community grew through the generosity of many individuals. The El Pilar experience provides a notable opportunity to model a world of possibilities

through collaborations with government, private sector, and community-based groups. Belizeans captured this vision early on—Harriot Topsey, Daniel Silva, Godsmen Ellis, Elias Awe, Anselmo Castaneda, and Joseph Palacio, to name a few prominent supporters—and the list has expanded across international borders over the past decade, bringing new energy and insight for the critical next steps.

4. Results: Experience and Works in Progress

Misunderstood and relegated to the margins of society, the modern Maya have been blamed for provoking widespread deforestation, soil degradation, and loss of biodiversity. This negative view of a venerable agroecological system is due in part to the peripheral role it plays in today's commodity-oriented industrial agriculture. The exceptional qualities of the Maya forest garden tradition show the success of an indigenous annual cropping strategy with the well-developed management of perennials, all linked to the value of the commons [30–32]. The astonishingly productive strategies are flexible and can be intensified with labor, skill, and scheduling. Far from environmental destroyers, Maya farmers are spiritual caretakers of the Maya forest who recognize the interrelated values of plants, animals, and habitat. These local practitioners are heroes who use strategies that shade the landscape, cycle the land cover, foster biodiversity, and feed people. These heroes need to be celebrated by promoting apprenticeships in school gardens, which highlight local traditions and bring forest gardens to all homes, rural and urban, in the Maya forest and the world.

The coming together of CET and AF from different cultural experiences was spontaneous and created an inclusive partnership motivated by the recognition of the value of traditions. The partnership developed clearly focused goals and nimble actions. Together, the collective network has drawn in local and international collaborators, building on a groundswell of local knowledge and practice that resonates with the challenges of climate change and food sovereignty. The result has been a step by step movement incorporating new ways of knowing. This work in progress began in Cayo, Belize, and has moved into the international sphere, with new potentials for developing inclusive education models built on local experience for the entire Maya forest.

4.1. Creating the Model School Forest Garden *Kānan K'aax*

Reawakening knowledge of the Maya forest begins with the creation of apprenticeships for new forest gardeners. Apprentice gardeners are the next generation of advocates and teachers to identify, cultivate, and enhance forest gardens in their own communities. We began with an education platform in Santa Familia, Belize, to develop this program, and we have set our sights far ahead, envisioning all schools in Belize cultivating school gardens—and the skills needed to tend them—with support from the El Pilar Forest Garden Network [32].

Our first major project was the development of an accredited teacher workshop (Figure 7), with the support of the Department of Education, on a 1-acre plot contributed by the Government of Belize and established on the Santa Familia Primary School grounds by the El Pilar Forest Garden Network. Named the well-managed forest, *Kānan K'aax* in Yukatek Maya, the school garden provides a base with a small open gallery, a water tap, and an outhouse suitable for outdoor learning, and was funded by the National Geographic Society. The curriculum is designed around environmental components of primary school learning. A three-day workshop outlines teacher–student activities, work exercises, and projects that make use of the garden space and encourage students to see the world as a classroom. The program stimulates listening, learning, and sharing, and it presents the experience as one of community investment; we have successfully validated and engaged the community through participation in these workshops. This coordination unifies our collective and opens up new horizons as a key pillar of our outreach program, which has become particularly important given our new reality under the pandemic.

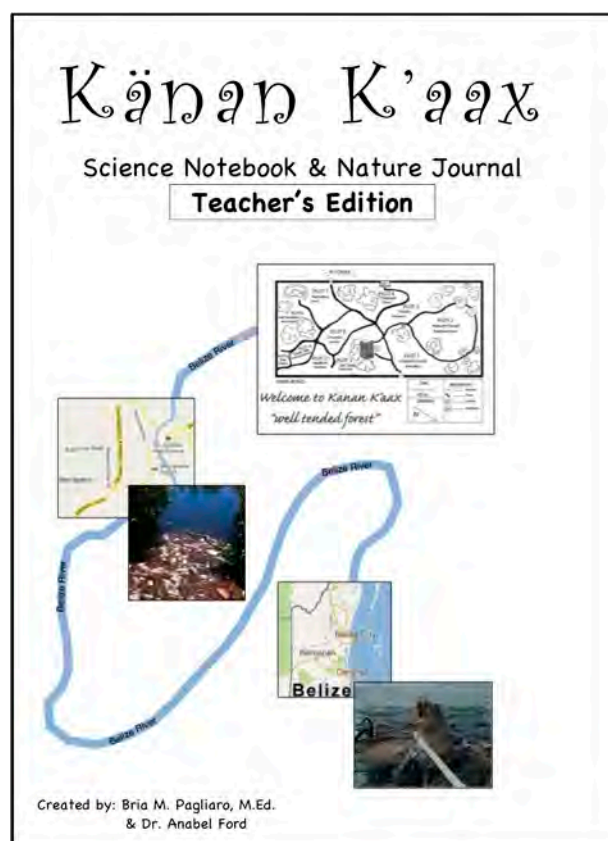


Figure 7. Cover of the 2011 Teacher's Guide for the *K'anan K'axx* School Garden. Credit: MesoAmerican Research Center.

4.2. Building Bridges and Making Connections to Wealth Untold

In the decades of lessons learned and the connections made, one of the main threads is venturing into the unknown equipped with the certainty of ancient wisdom. As the story unfolds, we are determined to tell it differently. This means to listen and appreciate without necessarily comprehending the meaning at first. We also recognize there are different ways of knowing.

Paradigm shifts take place when we include storytelling as a methodology. The story about the forest as a garden became our next major project with a country-wide traveling exhibition organized with the National Library Service. The exhibition focused on El Pilar and the Forest Garden and included stunning images, informative panels, and familiar plants. Each exhibit had an opening and closing event that involved local participants and featured forest gardeners, which enhanced community engagement. These events produced many "Aha!" moments, especially when Felecita Cantun, a Maya spiritual leader from Corozal, guided attendants through Sacred Maya prayer and ritual (Figure 8).

The forest gardeners network is a means by which to explore an important story of traditions (<http://mayaforestgardeners.org/>). Expanding from Cayo to the entire nation has given strength to the inexplicable bond among gardeners, be they in rural Cayo, Stann Creek, or any other district in Belize. Even though the framers had never met, they shared the same vision about the breadnut tree as an important contributor to food sovereignty. We have created these connections with stories.

Teamwork at the *K'anan K'axx* school garden has guided a commitment by the Ministry of Education and the Ministry of Agriculture to reestablish gardens in every school. The shared experience of relationships between plants and people is revealed when teachers tell about the importance of a plant to them and their family. We saw this also as inspiring home and community gardening, and this vision has now become a reality. The pandemic has enhanced the opportunities to teach about gardening as

a necessity, and we can see that the education outreach has borne fruit emphasizing the importance of forest gardens. Master forest gardeners are excellent mentors and forest gardens are the perfect setting for youth apprentices, which dovetails with goals of the DoE-Belize, championed by CET.



Figure 8. Felicity Cantu Offering Prayers for the El Pilar Exhibit hosted by the Mexican Embassy. Credit: Adma Chuc.

The feather in our cap was the sensational three-month exhibit hosted by the Mexican Embassy, featuring Archeology Under the Canopy and Household Belongings [33] in a presentation titled *Chaya! Dinner with the Maya!* This event, centered in Belize City, was El Pilar's debut in the main urban center of Belize (Figure 9). With media fanfare for the opening and closing and a mid-stage celebration with Garifuna gardeners, this heralded new avenues of interest, involvement, and collaboration [34,35]. We worked with the Director of the Institute of Archaeology, Dr. John Morris, and his team member Sylvia Batty, to create a display of ancient Maya household belongings accompanied by photographs of modern Maya kitchens from Macduff Everton. Ancient Maya jars, bowls, and vases were shown in a kitchen context and contrasted with contemporary home settings from a University of Belize student, a home in Belmopan, and the residence of the Governor General (Figure 10). This inspired Dr. Joseph Palacio, the first commissioner of Belizean Archaeology, to imagine a Garifuna house as well.



Figure 9. The Opening invitation to the Exhibit of the cultural Institute of Mexico in Belize. Credit: Mexican Embassy Belize.



Figure 10. Contemporary Place Settings with Tradition Maya Kitchen in the background. Credit: Adma Chuc.

The storytelling in the exhibit resonated and led to a major partnership with the Director of the Museum of Belize, Alexis Salazar. He envisions a new exhibit on archaeology and environment that links to the new Belize heritage education curriculum. El Pilar is the model they identify to develop educational materials to enrich learning for students and teachers, with emphasis on “Transformation and Connections: The World of the Ancient Maya.” This is a strand of the Belizean Studies Project that incorporates geography and history, both pre-Contact and recent. The Museum of Belize staff are developing their exhibit with the El Pilar team. Plans to create the didactics and build a virtual introduction to the forthcoming exhibit are underway.

4.3. Community Partnerships

Our relationships with rural and urban leaders in the community are strong. As the education outreach moves along, changes in the dynamics, the reshuffling of advocates, and the incorporation of greater diversity support the expansion outward from Cayo to the rest of Belize and beyond. We have found a new groundswell of interest in the forest garden based on mutual respect, which builds on a long-standing alliance with the Institute of Archaeology that began with Harriot Topsey’s vision [36]. This foundation has brought in the endorsements of the San Ignacio Hotel, the Governor General, the National Library Service, the Mexican Embassy, and now the Museum of Belize.

Our growing partnerships are widely recognized in the region through participation in events, projects, and activities beyond Belize. Private sector engagement has been remarkable, with funding and support from the Belize City Rotary Club, Belize Natural Energy, BRC printing, and Belize Electric Company Limited, and the San Ignacio Resort Hotel. Who would have imagined that paying a courtesy call to the Governor General would result in a fund-raising event to support school gardening?

We regularly appear on radio and television shows to promote our mantra on the benefits of forest gardens in rural and urban areas, in private and public spaces. We applaud the Cayo Town Board for the vegetables planted outside their town hall. Fruit trees and home-grown crops are planted as the traditions tell us, to heal the landscape, shade the soil, build fertility, conserve water, and care for people. Lectures and presentations about the Maya forest at schools and clubs, with students, teachers, and the

general public, raise the question of what we can do for our world. AF and CET have been keynote speakers at several local and international events to raise awareness of these issues. CET has promoted El Pilar and forest gardens at the Department of Education Principals conference and the convention of the National Credit Union League, where she shared the podium with the US Ambassador to Belize. AF is active on the international front, including UNESCO panels on Exploring Frameworks of Tropical Forest Conservation [37] and the Max Planck PanTropica workshop [38]. Her work on Maya forest gardens and the domesticated landscape involved her with the Indian Institute of Technology Madras interdisciplinary workshop on the Republic of Plants. All our presentations highlight the wealth untold of the forest by increasing visibility and participation at all levels [39].

As the visibility of the heritage of the forest gardens grows, we attract more individuals from many walks of life. The story still unfolds as the journey continues. The impact of the pandemic in Belize highlights the urgency for gardening, and this new situation has brought a greater appreciation for the importance of food sovereignty.

5. Sustaining Partnerships and Lessons Learned

The combined networks of AF and CET attracted supporters to the El Pilar education outreach programs, which are sustained by guiding principles and accumulated experience. It is essential to develop reciprocal partnerships and to build on lessons learned from events and activities. As the collaboration evolves, we continue to recognize one another's strengths and strategically leverage support for our endeavors. The resilience of this relationship is based on mutual respect and common concern for the legacy of the Maya forest. The passion that emanates from this collaboration draws attention and inspires engagement among more supporters. We see success as measured by the achievement of clear goals and building of trust rather than acquiring prizes and trophies, and we realize that determination, honesty, and steadfast commitment are the most important elements of our proposed community projects.

Partnerships develop with experience, and the narration here is based on extensive outreach efforts. Our prior experience facilitated the launching of several community projects, and we found there was still much to learn. We are aware that themes evident to our team need to be made clear and unambiguous to partners, and through this process of clarification, we discover and recognize our underlying suppositions. Assumptions about existing knowledge must be reviewed and common ground explored to achieve productive ends. We obtain strength from developing models that influence existing paradigms and honor cultural diversity. For example, global themes of climate change and biodiversity relate directly to our work with Maya forest gardens, providing reference points that people and institutions recognize. By connecting to this prominent issue, we have gained support from a wider cross section of the populace.

Our experience demonstrates that trust can be gained by listening without judgement and creating safe spaces for experts to express themselves. This approach expands potentials for reciprocity to meet mutual objectives. Through staging celebratory events, participating in local activities, and collaborating with community programs, we have been able to demonstrate inclusiveness and formally engage to recognize our partnerships in the community. Such an inclusive agenda provides a platform to establish relationships with collaborative projects and memoranda of understanding, and we have developed a resource database of individual and institutional contacts by building on this dynamic.

From our experience, we identify nine fundamental components that help to establish and sustain vital community relationships:

1. Seek to identify assumptions.
2. Respect the diversity of cultural traditions.
3. Recognize experts, wherever they are.
4. Pursue reciprocal endeavors.

5. Innovate with events, activities, and programs.
6. Always assess inclusiveness.
7. Formally credit partners for their work.
8. Maintain a contacts resource database.
9. Formalize institutional relationships.

Learning lessons is a continuous process as a project engages in adventurous new undertakings. We have found that respecting partners, and validating their diverse knowledge and experiences, is critical to successfully building an inclusive project. This means striving to honor the opinions and backgrounds of others by giving them space for expression. We also must identify controversies, both obvious and subtle, that arise from the meeting of different perspectives. Listening to our partners' perspectives, and attempting to distinguish common ground among all participants, have proved to be simple yet invaluable strategies to address such issues. We meet challenges with facilitation, exercised with patience and timing, to negotiate objectives, and we remember that acknowledging mutual aims draws in people and resources. As events and programs evolve, new supporters emerge, and we must constantly remind ourselves to recognize who we can work with and trust our accumulating intuition. We see the emphasis on the participation of youth advancing a sustainable future. Self-assessment is an ongoing process involving relationships, goals, and the relevance of activities, and this reflection provides an opportunity for team members to express themselves and shape the direction of future endeavors.

Based on the guiding principles of interaction, we have determined nine basic lessons to consider as we promote the community model:

1. Strive to honor the opinion and background of others.
2. Address controversy by listening for common ground to meet challenges.
3. Exercise patience and recognize timing in negotiating objectives.
4. Use creativity in identifying people and resources to enhance the mutual objectives.
5. Improve advocacy by appreciating individual supporters' values.
6. Trust your teams' intuition/instincts.
7. Know your experts' abilities and commitments.
8. Self-assessment is ongoing based on current events.
9. Allow space for team members to express.

The application of these principles and lessons are a continuing work in progress, as every step in building relationships requires constant reassessment. With each innovative event, every new activity, and all collaborative programs, we must evaluate the principles and appraise the progress and challenges that brought the endeavor to fruition. We see the only way forward as involving constant diagnosis and reflection.

6. Results: Recognizing the Past, Valuing the Present, Embracing the Future

This review of our efforts in the Maya forest is an example of how education outreach projects are invigorated with local collaboration. Shared goals and intentions are essential. When the priorities of archaeological projects include diverse entities and individuals, new horizons and unanticipated achievements can be reached. Local and international interests in tangible heritage loci and intangible cultural traditions create the platform for interactive development of relationships and the identification of common ground. We show here that archaeological projects in the Maya area are in a special position for creating unique partnerships. These projects derive from the academy, articulate with the government, bring appeal to heritage attractions, and have associations with the communities where they work. Required elements to build community partnerships include the recognition of specific

valued tangible heritage, a formal information outlet, an education link, and an honored cultural tradition. Each provide fertile ground for cultivating collaborations.

Our project recognizes four educational pillars that revolve around the heritage of the ancient Maya. We have identified the protected area of the El Pilar Archaeological Reserve for Maya Flora and Fauna as the principal pillar of community identity with its unique feature of Archaeology Under the Canopy [20]. We have emphasized the wealth of the Maya monuments, yet there are more recent connections to lumber and chicle camps. Much of Cayo's historic wealth was based on wood cutting and chicle bleeding, activities that continued into the 1980s. The wealth of the Maya forest—the product of ancient Maya creativity—is much more than this lumber and chicle.

The Maya forest garden is the wealth untold that underpins our four education pillars. It is found at the El Pilar Archaeological Reserve and is celebrated at the urban Cayo Welcome Center. It is revealed at the *Chak Ha Col* outfield of Master Forest Gardener Narciso Torres and is the vision of the rural *K'áan K'aax* School Garden. The Maya forest is the result of ancient Maya land-use practices that still link to traditional forest gardeners from the villages all over the region today. Creative outdoor education opportunities are guided by these traditional farmers and provide young and old with the chance to explore the nexus of culture and nature.

We share the narrative of our work in progress as we continue to discover the legacy of the Maya forest garden and the riches of El Pilar. The illustrious Maya civilization has been exalted but disconnected from the heritage on which it was founded. People have been taught that the Maya disappeared! Alfonso Tzul, a Maya historian and Master Forest Gardener from San Antonio village in Cayo, puts it succinctly and dramatically [40]: You are talking to one!

Belize is developing a new education program that highlights heritage focused on “Transformation and Connections.” The aim is to increase understanding of how people's interactions with each other and the environment have and continue to shape Belize (<http://www.belizeanstudies.com/>). The four pillars of El Pilar figure significantly in this new evolving agenda and will be the core of forthcoming exhibitions with the Museum of Belize that explore peaceful ways of knowing and being.

This is our way forward with lessons that will prove to be useful for Maya anthropological archaeology. Through our growing education outreach activities we sustain mutually beneficial partnerships with citizens. We are creatively envisioning local education and tourism based on the intangible heritage of the forest garden by way of exhibits and field trips. This showcases heritage land management as a conservation and development strategy from the home to the archaeological setting. The project engages with Government and Non-Governmental Organizations with cosponsored projects, programs, and events that bring attention to new ways of knowing and being. The Cayo Welcome Center presents a meeting place for tours that introduce the public, citizen scientists, and international researchers to the value of community participation. These processes reveal the logistics, the practicalities, and the nitty-gritty considerations that play out on the ground.

Where is the wealth and the heritage of Belize? It is on the path of discovery, and we see our program as a catalyst. We recognize that it is in the local traditions that have a cosmopolitan and eclectic source from the deep historical past of the Maya. Building on this creative pre-Contact foundation come adaptations by the Garifuna, and later the gardens of the new Belize with North Americans, Europeans, Chinese, Indians, and Central Americans as contributors, creating a complexity that provides a rich source of different ways of knowing. From the diversity of Belizean heritage, a global forest garden emerges with different sources of knowledge generating a vital base for health and well-being. The distinctiveness of Archaeology Under the Canopy models ways in which we can learn from nature. As we recognize the past and value the present, we invite ourselves to embrace a future guided by forest gardeners and sharing the gifts of the Maya from nature.

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