

Boston University Center for **Archaeological Studies**

Fall/Winter, 1998/99 Vol. 14, No. 1



Asa Randall surveying on Güney Tepe, Turkey (see page 7).

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Stitching Together Evidence for Women's Lives at the Spencer-Peirce-Little Farm

by Mary C. Beaudry

Since 1986 the author has directed excavations at the Spencer-Peirce-Little Farm in Newbury, Massachusetts. Owned by the Society for the Preservation of New England Antiquities (SPNEA), the farm, about 230 acres in size, has been occupied since the 1630s. Excavations in and around the surviving stone-and-brick farmhouse, built about 1690, and in the farmyard have revealed hundreds of features along with several hundred thousand artifacts dating from prehistoric times to the twentieth century. Previous reports by Professor Beaudry on research at the farm have appeared in Context 8:1-2 (1989): 1-3, 9: 3-4 (1991-92): 18-19.

At the Spencer-Peirce-Little Farm in Newbury, Massachusetts, we have recovered evidence of architectural changes to the still-standing house; of alterations to the landscape over time in the form of cutting or filling, planting gardens and trees, and creating pavings and walkways; of the construction and removal of outbuildings such as privies as well as of fences and drains; and of changing patterns of refuse disposal over time. We have also recovered artifacts and faunal remains that reveal a great deal about the lifestyles of the many residents of the house. Interpreting the lives of the women who lived at the site, however, has been a frustrating process, both because we learn very little about them through the documents and because it is often difficult to make a direct link between women who may have lived at the site and the artifacts we find in the ground.

But there is one type of object that, while not exclusively "women's artifacts," can reveal quite a bit about an important aspect of women's lives in the past. I refer to the artifacts of needlework and sewing. Each field season we have turned up numerous

such artifacts, some readily recognizable (e.g., thimbles, needles, straight pins, sewing scissors, etc.) and some less so for the archaeologist more familiar with ceramics, glass, gun parts, and hardware.

It was not until late in the summer of 1993, when volunteer excavator Carl L. Crossman plucked from the soil he was screening a monogrammed, silver-plated thimble of early nineteenth-century manufacture, that I was struck forcibly by the significance of these artifacts that, more often than not, get relegated to the oblivion of the "small finds" in archaeological reports. It was clear to me that the as-yet unidentified woman who lost a silver thimble bearing her initials lost something that for her was far from small in importance, but in fact was essential to the construction of character and gender identity in conformity with the expectations and social rules of her time.

Here, I thought, is a near-perfect point-of-entry into the study of an aspect of women's lives that held both homey and utilitarian as well as broader social consequence. In federal-period New England, young

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A selection of thimbles found at the Spencer-Peirce-Little Farm. Left to right: copper alloy with motto ("FORGET ME NOT"), nineteenth century; silver-plated, marked size 4, monogrammed (LWB), first half of nineteenth century; copper alloy, eighteenth-nineteenth century; child's thimble, copper alloy, eighteenth-nineteenth century. Photographs in this article by Michael Hamilton.

continued from page 1 girls and women took pride in their needlework, both plain and fancy. Jane Nylander, in her book Our Own Snug Fireside: Images of the New England Home 1760–1860 (New York: Alfred A. Knopf, 1992), stresses the importance of sewing in women's lives, noting that "young women were proud of the shirts they stitched for their fathers and brothers"(page 151) and that mending and remaking garments was a regular component of household work done or overseen by women. At the same time, genteel women engaged in fancy or decorative needlework as testimony to their skill in the feminine arts as well as to a social position that permitted leisure for such non-utilitarian pursuits.

Not all fancy needlework was a pastime for wealthy women of leisure, however. Many a needlewoman depended on the income her handiwork could generate. In the 1790s, for example, bobbin lace was made for cash as part of an extensive putting-out industry based in Ipswich, Massachusetts. Hence the artifacts of needlework from the Spencer-Peirce-Little Farm—or from other historical sites-must be interpreted along several lines of social and economic relevance: everyday, "practical" or "necessary" work (sewing, mending, and knitting); "fancy work" (embroidered pictures, muslin or "whitework," cutwork, candlewicking, tambour work, stuffed work, canvas work, etc.); and

work of either sort produced for sale outside the home.

Beyond this level is the broader scale of the social and symbolic significance of needlework of various sorts to women of successive households at the site. The dearth of documentary evidence about specific women whose names we know leaves us lacking a sense of biographical immediacy about their lives. By examining the material culture of needlework as it pertained to women's lives more generally, it should be possible to make these objects speak of the lives of the women of Spencer-Peirce-Little.

At SPL, we kept close track of soil layers using the Harris Matrix and paid careful attention to siteformation processes so that we can understand episodes of landscaping, earthmoving, and building and remodeling of the house and its outbuildings. This makes it possible for the material culture to be closely linked to the successive households that occupied the Spencer-Peirce-Little House about 1680-1986, and, most important, to the women of these households. Detailed documentary research conducted by SPNEA historians, as well as my own research and that of my students, includes family reconstitution and reconstruction of household composition, in so far as possible, beyond the immediate families (often extended families) who lived in the house and, some time after 1800, in its attached tenant farmer's house.

From the time it was built in the late seventeenth century, the Spencer-Peirce-Little House was home to many families, most of them very large. There were often many children present, as well as multiple generations. Colonel Daniel Peirce built the house and lived there with his wife Anne, their children, his widowed mother, and perhaps even some of his brothers and their families. Several generations of Peirces lived at the farm until the time of the American Revolution, when the property passed out of the hands of the Peirce family. Although the Peirce family was locally prominent, few records survive that can inform us about its members. The house itself is the preeminent artifact of the Peirce era, even though it has been altered by subsequent owners. From 1778 until 1838, the farm was owned by a succession of merchants who had amassed great wealth through trade and shipping or in privateering during the Revolution. It was during this time that many alterations and improvements were made to the house as well as to the farmyard. After 1838, however, the property was overseen by a group of trustees, who rented to a series of tenant farmers. The period of tenancy seems to have been a period in which the farm and its buildings, through misuse and neglect, settled gently into decline. In 1861, Edward Henry Little, a longterm tenant, was able to purchase the farm; as soon as he and his wife Catherine paid off their mortgage, they undertook an ambitious program of improvement. They replaced deteriorating outbuildings, relandscaped the farmyard, added technological improvements to the kitchen, and redecorated the interior of the house. The farm remained in the hands of Edward's and Catherine's descendants until it was bequeathed to SPNEA in 1986.

The continuous presence of women at the farm is attested by the many sewing artifacts that we have recovered over the years. We have found nearly a dozen thimbles dating to different time periods, including the monogrammed, silver-plated one

mentioned above. It bears a size mark ("4") and the initials LWB. Ironically, we have been unable to document anyone who lived at the site whose initials these could be. Among the thimbles we have recovered are some that are quite small in size—so small that they barely fit on the tip of my little finger! These are "maid's" or children's thimbles, and they testify to the fact that girls were instructed in needlework at an extremely young age, when their fingers were still tiny. Indeed, one of the most evocative Peirce artifacts that survives in a museum collection is a canvas-work picture sewn by Jane Peirce in 1720, when she was five years old.

Scissors were an important element of every woman's sewing kit, and we have recovered intact or fragmentary scissors of various sorts, some of which were specially designed for needlework. The small and sharply pointed fragment of a pair of embroidery scissors could have been used in fashioning buttonholes as well as in trimming embroidery silks. It evokes the image of a woman engaged in fine, detailed work with her needle.

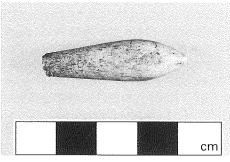
Among the many artifacts we have found over the years that at first mystified us are several that proved to belong in the needlework category. These include plain lead disks that served as hem weights (to keep men's coat tails from flapping in the breeze) as well as bone lace bobbins. One such bobbin is of particular interest, for it is of a distinctive form that differs from the bobbins used by the lacemakers of nearby Ipswich. Its head, around which the thread would have been wound, is missing, but its curious shape indicates it was the sort of bobbin used in the production of



A fragment of a pair of steel embroidery or buttonholing scissors, probably of the nineteenth century.

Honiton lace. Such lace was typically made by women whose origins were in the West Midlands of England; our bobbin could date as early as the seventeenth century. We know so little about the women who lived at the site in its earliest years that it is impossible to say who among the women in the Peirce household possessed the skill and dexterity to make delicate lace using simple bobbins made of bone.

There is at least one example where location of needlework finds is a clue to actions: we found a high proportion of pins and a thimble, along with a large number of smoking-pipe fragments, just to the west of the front porch, suggesting that members of the household sat here companionably,



Fragment of a seventeenth-century bone bobbin found at the Spencer-Peirce-Little Farm, which was used in the production of Honiton lace.

smoking and sewing, enjoying good light and a refreshing breeze.

These are just a few examples of the approach I am taking in my study of the artifacts of needlework and sewing from SPL. I am asking such questions as the following. Are the items we have recovered the sort that would be used for everyday sewing and mending or for fancy embroidery? Are any tools designed to carry out specific tasks or types of work? What does the material of which an item is made tell us about its cost, its use, its potential symbolic import, and so on? I have really only begun to explore the possibilities of what can be learned from these small yet highly evocative artifacts. Among the thimbles we have found is one that bears the motto "FORGET ME NOT." This serves well as the motto of my study

Bard Honored for Exploration of Aksum

Professor Kathryn Bard of Boston University's Department of Archaeology was honored by the National Geographic Society with the 1998 Chairman's Award for Exploration. Professor Bard made the following comments in accepting the \$15,000 award at a presentation ceremony of the Society in Washington, D.C., on November 6, 1998.

Then I was five or six my paternal grandfather gave me a beautiful wooden puzzle of animals of the African savanna. From that point on I was determined to see those animals giraffes, elephants, lions, and othersin Africa in their real environment. Many years later I took time off from graduate school and traveled overland in Africa, from Cairo to Capetown, spending five months of that year in Ethiopia. I saw plenty of wildlife, including over 1000 hippopotami on a two-week trip down a deserted part of the Omo River in southwestern Ethiopia. But what was most memorable to me that year were the ruins of ancient Aksum and the unique indigenous culture of highland Ethiopia.

Aksum was the capital of an early African civilization that was a major trading partner with Ptolemaic Egypt and then Rome, in a trading network that extended from the Mediterranean to southern India. The largest known monolith in the world—about 108′ long—was quarried here in granite. This was a literate culture: the kings minted continued on page 4

of the artifacts of needle-work and sewing, for through it I hope to provide a way of remembering the needlewomen of the Spencer-Peirce-Little Farm.

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Kathryn Bard accepts award from George Stuart, Chairman of the Committee for Research and Exploration at the National Geographic Society. Photograph courtesy of Nina Tisara.

standardized coins in gold, silver, and bronze, and left monumental inscriptions in Greek, South Arabian and Ge'ez—the earliest written Ethiopian language. We have found evidence of a wine jar imported from southern France and a carved carnelian impression of the goddess Roma, most likely from Rome itself. Then in the fourth century an Aksumite king named Ezana converted to Christianity, and the Ethiopian Orthodox Church is one of the oldest churches in the world.

My first trip to Ethiopia, however, was shortened by a military coup in November, 1974. One Sunday morning I woke up in Addis Ababa and soon learned that the acting president, who had taken over when the emperor, Haile Selassie, had been deposed, and about 60 officials of the provisional government, had all been shot the night before. The military dictatorship was heavily armed by the Soviets, and the ensuing civil war did not end until 1991.

Sometimes dreams are suppressed for a long time—but don't become completely buried—and in 1992 I returned to Ethiopia and climbed Bieta Giyorgis hill overlooking Aksum. I later found out that a battle had been fought along the hill slope and there were still landmines buried there. Most of the landmines got cleaned up, and the next year we began our first excavations in the stela field on top of Bieta Giyorgis. We now

know that there were well over 300 stelae here, and large underground tombs carved in the soft tufa bedrock. To the west of the cemetery and stelae field is a palace complex covering an area of about thirty acres. Remains of the earliest palace structure at Aksum are now known to be located here on Bieta Giyorgis hill.

At first we were a real mystery to the people of Aksum, who had not seen any archaeologists in almost a generation. The most sacred belief of Ethiopian Christians is that the Ark of the Covenant was brought from Solomon's temple in Jerusalem and is now in a small chapel in Aksum—about thirty feet from our store house, on the other side of a high stone wall. No, we had not come to raid their ark, we had to explain, but were there to dig up unimpressive potsherds and other such useless artifacts.

How, when, and why did this early African civilization arise? Six years of excavating at Aksum have yielded impressive results, and we are now rewriting the early cultural history of Ethiopia, extending back the origins of Aksum by several hundred years into what was previously thought to be a "dark age." Everything we excavate is new data, and this is the most exciting aspect of our fieldwork there.

Archaeology may seem terribly romantic, and the problems of working on a mountaintop about 8,000 feet about sea level are quite distant tonight: the one-hour hike at six

Art, Antiquity, and the Law

by Clemency Coggins

A conference entitled "Art, Antiquity and the Law: Preserving our Global Cultural Heritage," was held October 30–November 1, 1998, at Rutgers, State University of New Jersey, sponsored by the University's Global Programs and the Department of Art History. This ambitious two-and-a-half-day conference brought together cultural property administrators, law enforcement officers, lawyers, and concerned scholars from many parts of the world, who described the overwhelming and continuing losses of their cultural heritages.

The focus of the Middle Eastern panel was Iraq and the terrible consequences for the preservation of Iraqi monuments, sites, and museums that result from the current international sanctions against that country. In West Africa the destruction and traffic

a.m., up the slopes of the mountain along a narrow path—because the only other way to get to the site is by mule; the fleas that get under my clothes no matter what precautions I take; and the hail storms with no other available shelter than a farmer's thatched-roof hut. But despite these problems and many more, this is the most challenging and stimulating work imaginable—to put together the excavated fragments of a remarkable and little known early civilization into a coherent image of the past.

Archaeology today, however, is a multi-disciplinary science, and credit for this award should also be shared with the co-director of the project, Professor Rodolfo Fattovich of the Oriental Institute, Naples, Italy, and his team of Italian archaeologists, and my Boston University colleague, Mike DiBlasi.

I feel deeply honored here tonight. Thank you for all your support of my fieldwork and thank you for this award; it will be put to good use at Aksum.

in archaeological materials was described as quite recent and escalating, as elsewhere. A Chinese archaeologist discussed the looting of a bronze-age site in China, but did not address the current expanding market in Chinese antiquities. For Italy, recent thefts from Sicily, and efforts to recover such looted sculpture and ceramics were presented as but a fraction of the staggering, continuing loss of millennia of Italian cultural heritage. The mandate and structure of the principal Mexican agency charged with the protection and preservation of cultural property was outlined and explained in detail. For Ukraine, the excavation and development of the Crimean site of Chersonesos was presented as part of the cultural heritage of a new country with classic problems. Finally, most dramatic and agonizing was the detailed exposition of the deliberate destruction of hundreds of historic mosques and other monuments in Sarajevo, Bosnia-Herzegovina, presented as the conscious effort to eradicate a culture.

In addition to these regional sessions, panels considered: the UNIDROIT Convention; the Changing Role of Museums; Theft, Forgery and Illicit Traffic; Preservation Strategies; Ethics Across the Board; and Building Consensus. Organized by Archer St. Clair Harvey of the Art History Department and Seth Gopin of Global Programs, the conference included more than fifty speakers and discussants. The author was the discussant for the Latin America panel. During the panel discussion on the Changing Role of Museums she proposed that museums declare a long moratorium on the acquisition of all antiquities and endangered ethnic materials, after which policies of due diligence and total documentation would be applied selectively.

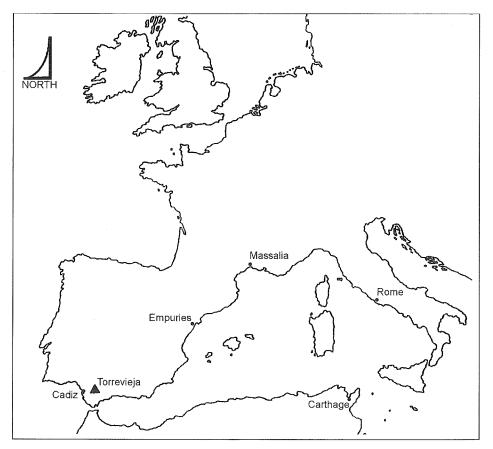
Clemency Coggins, Professor of Archaeology and Art History at Boston University, and John Henry Merryman, Professor Emeritus at Stanford Law School, received awards during the conference from Rutgers University-Global Programs for Outstanding Contributions to International Cultural Relations.

Breaking New Ground in Southern Spain

by Murray McClellan

t is not often that one has the opportunity to break new ground—both figuratively and literally—in a field. This was precisely the opportunity, however, that was offered to us when my friend Francisco Giles Pacheco, Director of the Municipal Museum of El Puerto de Santa María, called me last February to inquire if I wanted to join a new excavation his team was beginning at a ninth- to third-century B.C. Iberian settlement located in the town of Villamartín. I was familiar with the excellent research that the archaeologists from El Puerto de Santa María were undertaking in the Cádiz province of Andalucia (in the summer of 1996 I had directed an archaeological survey of the United States Naval base in nearby Rota), and I was quite excited by the prospect of working with them.

The new excavation project at Torrevieja grew out of a regional survey of the Guadalete river valley carried out by Paco Giles (as he is known in Spain) and his team between 1989 and 1994. The fiftymile-long Guadalete River, which flows down from the Sierra del Pinar into the Bay of Cádiz, was virtually unexplored by archaeologists prior to this survey, in contrast to the relatively well explored surrounding Atlantic and Mediterranean coastlines of Andalucia, or to the much better known Guadalquivir river valley to the north. Paco Giles's main research interests focus on the earliest pre-history of Iberia—he is one of the principal investigators of the excavations at Gorham's Cave in Gibraltar, where Professor Paul Goldberg of Boston University has undertaken geoarchaeological studies—and so his primary goal in the Guadalete survey was to locate Paleolithic sites and to reconstruct the Pleistocene environment of the river valley. Giles's survey team, continued on page 6

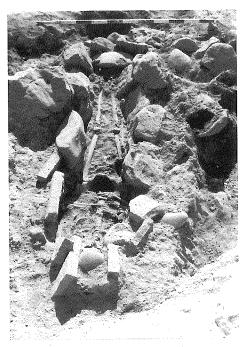


Map showing the location of Torrevieja, Spain. Map by Francisco Estrada Belli.



Professor James R. Wiseman and students of the Boston University Field School break ground at Torrevieja, Spain.

continued from page 5 nonetheless, recorded all archaeological evidence of past human activities in their survey zone, including twenty-eight settlements of the first millennium B.C. Of these, twenty-one date to the tenth to sixth centuries B.C. (Final Bronze/Orientalizing) and seventeen date to the sixth to third centuries B.C. (Turdetanian period); eleven sites contained surface materials from both periods. An exposed profile of over four meters of stratified deposits discovered at the site of Torrevieja, which is located on a bluff overlooking the Guadalete River, contained material from the full range of the Final Bronze/Orientalizing and Turdetanian periods and thus provided a key chronological control in the interpretation of the survey surface collections.



A sixteenth-century A.C. burial encountered near the surface in 1998.

Scholars are in general agreement that Iberian culture was profoundly transformed in the first millennium B.C. as a result of Iberian contacts with Eastern Mediterranean peoples, although the exact nature of this transformation is still little understood. About 800 B.C., a Phoenician trading post was founded at Cádiz, and within a few generations a series of Phoenician settlements were established along the southern coast of the peninsula. About 600 B.C., an enclave of east Greek settlers was established at Empúries on the northeastern Iberian coast and at Massalia in the Gulf of Lyon. Reacting to the opportunities for trade that these east Mediterranean settlements offered, indigenous Iberian polities were transformed, becoming more socially complex and exploiting more intensely the agricultural and mineral potentials of their territories.

These indigenous Iberian polities continued to interact with the non-Iberian coastal communities until both were incorporated within the Roman provinces of Hispaniae Citerior and Ulterior during the second century B.C. In southern Spain, the former Phoenician colonies increasingly came to be dominated by Punic Carthage, which founded its own colony at Carthago Nova in 228–227 B.C. The northern Greekspeaking polis of Empúries allied itself with Rome and served as the base for the Roman counter offensive in Spain following Hannibal's invasion of Italy in 219 B.C.

The central research goal of the new excavation project at Torrevieja is to supply more information about the interactions between indigenous communities in the hinterland and Phoenician and Punic communities of the coastal zone around Cádiz and to document the nature of the cultural transformations of the indigenous peoples of the middle Guadalete river valley. The Spanish archaeologists from El Puerto de Santa María interpreted the distribution of settlements of the Final Bronze/Orientalizing period as revealing a stratified social organization with centralized political control of the territory, and they interpreted the pattern of settlements of the later Turdetanian period as representing a decentralization of this political control (Gutíerrez López, et al. 1995). With the financial and logistical support of the township of Villamartín, Jose Maria Gutíerrez López obtained permission from the government of Andalucia to begin a series of excavations at Torrevieja in order to test this model. Our team from Boston University, which consisted of myself as co-director, my colleagues, Professor James R. Wiseman and Dr. Pamela J. Russell; teaching assistants, Alan Kaiser and Christine Lovasz; and nineteen undergraduate students from Boston University, New York University, and Colorado College, joined Jose Maria Gutíerrez in early May for the initial six- week campaign of excavation at Torrevieja.

reaking new ground at a site always brings surprises. We decided to open up a series of 10 m × 5 m contiguous trenches along the central ridge of the site where we expected to find the same depth of stratified deposits that had been revealed in the profile discovered on the edge of the site during the survey. Instead, after removing only a few centimeters of the topsoil, we encountered eleven mid-sixteenthcentury A.C. burials, which can be associated with the foundation of the modern village of Villamartín, a fact indicating that a significant amount of erosion has occurred at the site during the past 400 years. This erosion, however, seems to have had little impact upon the pre-sixteenth-century A.C. levels encountered. In one area, a deep pit filled with material of the early Islamic period (ninth-tenth cen-

An Undergraduate in the Kingdom of Ararat

by Asa Randall

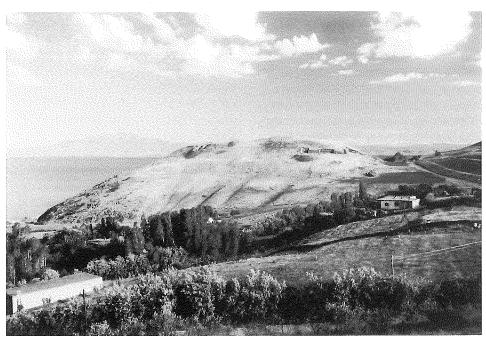
As Turkish Airlines flight 349 headed eastward I peered out of the window at the country-side below and asked myself what I was doing here. Two weeks previously, until the middle of June, 1998, I had been in the lush, humid environment of Alabama, working at the Paleoindian site of Dust Cave. All my previous field experience was in New World prehistory, and this is what I intend to study in graduate school. The mottled tan ground I now saw was neither lush nor humid, and it certainly wasn't Alabama. Villages appeared here and there beside spots of green produced by life-giving springs, and mountains creased with small patches of snow that had somehow managed to survive the summer heat seemed to envelope us as we began our descent. Had I come because various people had convinced me it would be good to get as many varied field experiences as possible under my belt before tying the rest of my career to American archaeology, or was it just time for an adventure? The plane descended over the dark blue waters of Lake Van and touched down on a runway by the shore. I stepped off the plane and was immediately

overwhelmed by the scorching sun, dry heat, and armored cars.

I was, of course, not totally unprepared for what I was getting into. This land had been known as Urartu in the early Iron Age—an ancient rival of the Assyrians which I had first heard of in Professor Paul Zimansky's "Lost Languages and

Decipherment" course in the fall of 1996. I had even worked my way through a few cuneiform inscriptions written in its arcane language. But like many of the other civilizations I encountered in the course of three years at Boston University, I filed the Urartians in a mental folder and lost sight of them as coursework in other classes demanded more immediate attention. Perhaps courses were not the only reason. As a second year undergraduate student, fieldwork was rather foreign to me. That I might

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The citadel mound of Ayanıs from the south, with Lake Van and Süphan Da in the background.

turies A.C.) was discovered, making Torrevieja one of the few places in all of southern Andalucia where this period is represented. No Islamic material was encountered in the other units, where levels of the fifth-third centuries B.C. underlay burials of the sixteenth century A.C. No Romanperiod material was encountered in the 1998 campaign, reaffirming the preliminary suggestion that the site had been abandoned at the time of the Second Punic War. Perhaps the most significant discovery of the 1998 season was a series of four large pits cut into bedrock, a preliminary examination of the material from which suggests that they were used in the ninth-seventh centuries B.C. and filled in after the sixth century B.C.

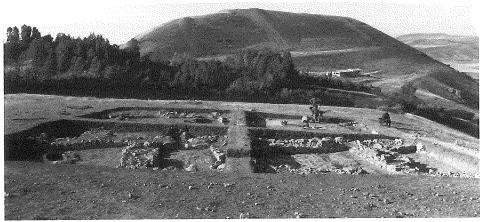
Included among this material was a small amount of Phoenician pottery, ivory, and glass, as well as a larger amount of indigenous Iberian ceramics made in the Phoenician style. A limited amount of material from the Chalcolithic period (about 2500 B.C.) was recovered in mixed contexts, but no pure Chalcolithic strata were encountered.

The 1998 preliminary season of excavation demonstrated that the site participated in a trading network that reached the coast and thus had indirect contact with the Phoenician and larger Mediterranean worlds. The exact effect that this contact had upon the indigenous Iberians of the Guadalete river valley has yet to be determined.

Further Reading

The best general introduction (in English) to the archaeology of Iberia in the first millennium B.C. is R. J. Harrison, Spain at the Dawn of History (New York: Thames and Hudson, 1988). For a preliminary publication of the Guadalete River survey, see J. M. Gutierrez López, J. A. Ruíz Gil, F. Giles Pacheco, P. Bueno Serrano, J. J. López Amador, J. J. Aguilera, and L. Rodríguez, "Aproximación a la organización del territorio en la cuenca del Guadalete durante el 1 milenio A. N. E.," in IV Congreso Internaciaonal de Estudios Fenicios y Punicos, 1995 (Cádiz: 1998).

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The Pınarbası excavations from the north. The dig house is visible on the side of citadel mound in the background.

continued from page 7
actually be able to work at an Urartian site, or on any other ancient civilization in a distant land, seemed a remote possibility. And let's be honest: at the time, my primary interests lay elsewhere. Paleoindians and Egyptians were both vying for my immediate attention.

Now, on the last day of June, 1998, I had traveled across Turkey with a small American team led by Professor Zimansky and his wife Elizabeth Stone, a Professor of Anthropology at SUNY, Stony Brook, with all expenses paid thanks to the generosity of private donors and the National Geographic Society. Also in the group were two graduate students, Christine Bedore of Boston University and Jennifer MacCormack of Yale. Ken McDonough, a recent graduate of Stony Brook, completed the American contingent. We were headed for the Urartian stronghold of Ayanıs, where we would join a much larger Turkish team from Ege University (Izmir) which has been excavating the fortress mound since 1989. Dr. Altan Cilingiroglu, the project director, invited Stone and Zimansky to the site three years ago to undertake survey and excavations in the outer town that surrounded the fortress.

After landing in Van we were soon on the road to Ayanıs, 35 kilometers to the north. It seemed that the farther we traveled, the fewer cars and the more goats we saw. This was all in keeping with my romantic visions of pastoral life, but as we passed through Alaköy, a village several kilometers from the site, I noticed a

forest of satellite dishes rising above the mud-brick houses. Agartı, the nearest settlement to Ayanıs, was indeed a quaint village locked in time somewhere around 300 B.C., but a new store catering to the need of archaeologists by selling candy, cigarettes, soft drinks, and nylon stockings for the flotation machine, had just opened there. I caught my first glimpse of the citadel of Ayanıs as we rounded the top of a ridge and proceeded down into a basin, and the romantic visions kept on coming. As we descended, it rose above us, impressive in its command of the valley. I could imagine it as the seat of power it must have been, its lords sending down edicts to inspire and terrify the inhabitants below. Lake Van stretched beyond the other side of the site up to the foot of mighty Mt. Süphan, a volcano second in size only to Mt. Ararat in this part of the world.

The dig house/camp at Ayanıs is rather modern and has all the amenities and accouterments that one might need. The house itself, commanding a spectacular view of the lake, has a dining room which can seat 25-30 people, a kitchen suitable for preparing meals for that many, a computer room where at any given time three computers were in active use, another larger room that served as a lab and general work area, and a conservation lab. The directors, senior staff, and guests had their own rooms in a wing of the house. Fifteen Turkish students and four Americans, undergraduates and graduates alike, slept in three large Quonset-style tents. The camp was furnished with

electricity and water, intermittently, and a radio telephone that transmitted its signals across the lake to a relay station on Mt. Süphan, also intermittently.

It did not take long to fall into the rhythm of the camp. Six days a week we followed a cyclical schedule: breakfast, excavation, second breakfast, excavation, lunch, break/lab time, tea, lab time, dinner, lab work, and then bed just in time for the cycle to begin again. We all served on a duty roster, rotating the task of preparing meals on a daily basis. I think this greatly facilitated the integration of the whole expedition, as the Turkish students struggled to explain to the American member of their rotation how to prepare Turkish food. In the end they usually gave the Americans the job of grinding tomatoes or peeling potatoes, since this was simpler for them than explaining the intricacies of pasta boiling and onion slicing. It wasn't entirely a language barrier that created this division of labor, as most of them spoke English well enough—I suspect they did not trust us to cut things up without hurting ourselves.

There was no more of a dichotomy between the excavations of the Turkish team and those of the Americans than there was in camp life. While the Americans were not actively participating in work on the fortress, two Turkish students worked with us in the outer town and there was constant visiting and dialogue between the two groups.

Several areas were being excavated on the citadel, and for a North American prehistorian, they were all incredible. In one trench system running down a steep slope was a series of magazines with scores of storage jars, each large enough to climb into. On the summit, a vast exposure had revealed a hall with large basalt pilasters, from which bronze shields, quivers, swords, spears, and helmets had fallen when the building was burned. Last year a temple was discovered in the middle of this, and on its façade was one of the longest and historically most informative Urartian inscriptions ever discovered. It told how King Rusa II,

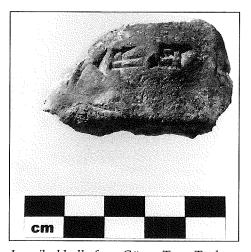
the founder of Ayanis, had settled captive peoples here, deporting them from many of his neighbors, including Phrygia, Hatti (meaning the Neo-Hittite kingdoms of Anatolia and Syria), and Assyria. There was no time to uncover the cella of the temple in 1997, but in 1998 its excavation was the first priority. I don't think that I could have been at the site in a more interesting year.

On our trips to the citadel mound we watched the drama of this excavation unfolding, as four meters of destruction debris were gradually removed and the workmen came closer and closer to the temple floor. The first remarkable thing to appear were inlaid depictions of winged bulls and floral motifs on the ashlar basalt blocks that formed the lower courses of the temple's walls. Then an alabaster altar appeared with incised patterns of sacred trees and more winged bulls. Although the cella had been looted and badly damaged in the violent destruction of the citadel, one could still see the places where figures of animals had once stood in rows around the base of this pedestal, marked as clear "shadows" in the blacking caused by the fire. The floor of the cella itself was remarkable, consisting of 81 beautifully worked alabaster tiles.

I did my own digging in the outer town. In 1997 the American team had conducted a shovel-test survey of an area 1.5 x 1.0 km around the citadel and explored two more limited areas in a magnetic field gradient survey. On the basis of the results of these, two areas in which there appeared to be substantial buildings were selected for excavation. Each had its own distinctive flavor, both archaeological and environmental. The first, Güney Tepe, was located approximately ten minutes from camp, high up on the side of a hill, amongst currently used fields. I did my first digging here, where we found two buildings separated by a small street or alleyway. In the latter, I soon found myself working through a rather extensive midden deposit, filled with a dark ashy soil. This ran all the way down to bedrock, with sherds and bones so densely packed it seemed as though

every time my pick or trowel went into the ground it hit something. The extensive collection of faunal material that came out of this included bones not only of sheep/goats, but masses of cattle. I also found an inscribed clay bulla bearing the partially preserved name of some long-forgotten Urartian, our first clear indication that anyone in the settlement knew how to write. Other artifacts found on Güney Tepe included several iron projectile points, copper bucket handles, one decorated fragment of bronze sculpture, and several pieces of obsidian.

The other site, Pınarbası, lay more or less at the same elevation as the



Inscribed bulla from Güney Tepe, Turkey.

camp on the edge of an ancient lake terrace north of the citadel. It was only a short walk from a spring which provided the coolest drinking water around. Here the magnetometer had indicated the presence of a rather large building, and we were not disappointed: excavations revealed well defined walls of a robust 1.5-m thickness, one of which had a buttress, which suggests a public function in ancient Near Eastern architecture. The walls were based in foundation trenches that the Urartians had cut into bedrock. Many of the rooms showed signs of plastered floors and one room, perhaps a courtyard, had two large stone column bases.

There was not as much soil covering this area as on Güney Tepe, and the number of Urartian small finds, other than pottery sherds, was rather low. They did, however,

include a few pieces of iron and a stamped clay bulla. After the Urartian period this area served as a cemetery. Two pithos burials were cut into the Urartian buildings, both containing female skeletons. One was not well preserved, the top of the pithos having been destroyed, and contained only two simple rings as grave goods. The second burial consisted of a complete pithos topped with a cairn of rocks and included a faience necklace, a glass bottle, a silver coin struck in the reign of Augustus, first emperor of Rome (27 B.C.-A.D. 14) and seven rings of iron, bronze, and bone. One of the rings had an engraved carnelian seal stone that looks remarkably like the intaglio illustrated on the front page of the last issue of Context, (13:3–4), which was found at Aksum, Ethiopia, only a few weeks before our discovery.

I worked half the season at Güney Tepe and the other half at Pınarbası and the experience was one of excitement, tempered by utter frustration. At each site eight locally hired workmen— children of schoolage, for the most part—did most of the earth removal, while we directed and recorded the results. The workmen had designated specialties which they kept for the season—pickman, wheelbarrow pusher, or shovelmanbut practiced these in rotation with tea-making, napping, and brushing up on their English conversational skills. Persuading them to do what I wanted even when they were

continued on page 10



Silver coin of Augustus from a Romanperiod burial.



Carnelian intaglio (H. 1.6 cm; W, 1.3 cm) from one of the Roman-period burials.

continued from page 9 enthusiastic was a challenge. I guess I, too, might have a certain lack of respect for a foreigner who tried to tell me in sign language to scrub rocks all day, or sweep down dirt surfaces. In any case, it is a far cry from excavation in North America where the people doing the digging are actually there because they want to dig.

Back at the camp, the lab work was also taxing. The dig policy is to minimize backlogs, so all of the material excavated each day had to be processed quickly. This work included coding the finds, classifying the pottery, and drawing diagnostic sherds or other artifacts. Somewhat ironically for a person whose primary interest is aceramic cultures, I got stuck with the job of classifying the pottery. Actually, it wasn't all that far removed from my experience at Dust Cave, where I spent countless hours classifying and recording lithic debitage. I remember learning in AR101 that at many sites, rightly or wrongly, only diagnostic sherds were kept for analysis. At that time, before I understood the concept of sampling, I was horrified that anyone would discard a part of the archaeological record. Here I came to regret that all the sherds found in the outer town were being collected, and envied the citadel excavators who had streamlined their sampling procedures over the years.

For the most part, Urartian pottery is pretty dull stuff, but for the Outer Town project it is of crucial importance. Many Urartian citadels

LaBree and Hamilton Honored

The fall of 1998 marked the tenth year that Evelyn LaBree, Department Administrator, and Michael Hamilton, Staff Photographer, have worked in the Department of Archaeology. Both were honored at fall receptions by the University and by the faculty, staff, and students of the Department of Archaeology for their dedication and exemplary service.

Evelyn is a native of New Hampshire and received a B.A. from the University of New Hampshire and an M.S. in journalism from Boston University. She writes and paints in her spare time. She also travels a great deal and is planning a trip to France during the summer of 1999.

Michael has been a full-time photographer for many years, both as a free-lancer in the private sector and for Boston University. His photographic work for the Department of Archaeology has included participation in field projects in Belize and Greece, as well as special photographic assignments at Wood's Hole, the Spencer-Peirce-Little House, and elsewhere in New England.

Evelyn LaBree and Michael Hamilton review catalogues for equipment purchases for the departmental slide library.



have been excavated, and they contain a more or less standard inventory of pottery types that is uniform all over the kingdom. Settlements, however, are very poorly known. Urartian inscriptions, like the one discovered on the Ayanis citadel in 1997, suggest that the people who built and supported the fortress had been brought to this place from foreign lands, and it would be interesting to find some evidence of this in the archaeological record. One interesting kind of artifact is a highly burnished red ware, well fired and with few inclusions, which is normally considered an elite or "palace ware". We found it in both outer town areas, interestingly enough in larger quantity on Güney Tepe, where the architecture was less substantial, than at Pınarbası. It would appear that this peculiarly Urartian red ware was "good china" used in varying degrees by quite a few of the residents of the larger community. Other types of evidence, such as animal bones and floral

samples, are being studied to amplify our understanding of who was living where at Ayanis.

My summer's work in eastern Turkey has not convinced me to give up on the archaeology of New World caves or abandon flaked stones for broken pots. I am not even sure that I will be able to apply the excavation techniques I learned to any future excavation, particularly my new found abilities to exhort teenagers in broken Turkish. Yet, when the time came, it was hard leaving Turkey. Its people, culture, and awesome beauty were a constant source of inspiration, and the experience of working there continues to grow on me. The massive walls, intricate art, and enigmatic inscriptions of the Urartians will illuminate everything I excavate in the future with a contrasting light.

Asa Randall is an undergraduate archaeology major who was recently elected to Boston University's chapter of Phi Beta Kappa.

"A Pillar of State...Majestic, Though in Ruin": the Royal Acropolis of La Milpa

by Norman Hammond

"...and in his rising seemed a pillar of state... majestic, though in ruin..." (John Milton, Paradise Lost, Bk. II, 301-305)

At first it looked like yet another looters' trench: ever since we began work at the Maya city of La Milpa in 1992, we had been finding these destructive tunnels, penetrating deep into the heart of almost every major pyramid and palace at the site. Some were large enough to drive a pickup truck into, others were just wide enough to admit a human being wielding a pickaxe to cut through the masonry in search of buried tombs and the all-too-saleable grave goods they contained—polychrome painted vases, carved jades, and other artifacts of the ancient Maya elite.

The looting of La Milpa, which lies in northwestern Belize close to the frontiers with Mexico and Guatemala, had been carried out around 1980, part of a sustained campaign to supply dealers, museums and collectors in the U.S.A., Europe, and Japan which had targeted many Maya cities, both those long known and well explored and others, like La Milpa, where little work had been done because of the difficulty of access to them. While some looters' trenches hit their targets, many others were dug into buildings where tombs or offerings rarely occurred, resulting in nothing except destruction of the Maya heritage.

This tunnel, leading into the back of one of the palaces in the South Acropolis, looked like one of those, but we prepared to clean it up and draw the layers exposed in section in the tunnel walls, to rescue whatever information we could to add to the history of La Milpa. We were taking a calculated risk that the results would be worth-while: Belize's Archaeological Commissioner had decreed that if we studied a looters' trench, we then had to repair all the damage done by the looters (a decree later

expanded to embrace even unstudied looters' holes in any building that we examined, a potentially expensive and open-ended commitment that could rapidly soak up all our research funds). But we had important questions to ask: that was why we were there, on a remote hilltop in the tropical rain forest, in a ruined city abandoned more than a thousand years ago.

La Milpa was discovered in 1938 by the late Sir Eric Thompson, who had noted a dozen carved stelae, one with a date in the Maya calendar equivalent to November 30, A.D. 780. They lay in a plaza twice the size of a football field, bordered by templepyramids up to eighty feet high and a palace nearly three hundred feet long, the ceremonial heart of a city which, we now know, probably had a population of around 45,000 in the eighth century A.C. (Fig. 1). The Great Plaza, with its four temples, two ballcourts for playing the sacred Maya ballgame, and carved monuments was the focus of Boston University's research, aided by the National Geographic Society, Raymond and Beverly Sackler and other donors, from the beginning of our project in 1992 (see Further Reading for other articles published on La Milpa). We showed that the community had begun as a small village about 400 B.C., now deeply buried below later construction, and early in the Classic Period, about A.D. 300, had rulers who dedicated the first stone stelae. These were initially small and plain, but by the early fifth century they were carved with the image of the ruler in ceremonial garb, and one, Stela 15, was eleven feet high. Small temples were also built at this time, but very little pottery of the period between A.D. 300 and 600 has been found, suggesting either a very

small community in spite of the pretensions of its rulers, or a focus of habitation well away from the ceremonial plaza where the stelae were placed.

We found the tomb of one of these rulers in 1996, dug into the bedrock beneath the plaza, and unmarked by any monument or temple: from this and the rather poor and mismatched set of burial goods found with him, we surmised that his burial had taken place when La Milpa was in precipitate decline in the fifth century A.C., possibly as a peripheral result of warfare between much larger Maya cities to the west. La Milpa seems to have remained more or less abandoned until after A.D. 700, but then to have grown at a rapid rate: almost all the massive architecture that survives today probably was built between A.D. 700 and 850, judging by the style of the pottery left behind by the Late Classic inhabitants.

Among these buildings was what we dubbed the Southern Acropolis, a complex of courtyards forming a long rectangle at the southernmost end of the civic core, rising high above Plaza C at its northern end and diminishing both in structure height and elevation to the south. The acropolis stood between two deep ravines, part of a series of valleys that dissect the long ridge on which central La Milpa lies, cut by intermittent streams that eventually flowed northwest to the Rio Hondo drainage. We had not studied the acropolis prior to 1998, although we had interpreted it as the likely palace of the Late Classic kings of La Milpa, the seat of government and administration: now, as we cleared the tropical growth from its long mounds and sunken courtyards, we could see striking contrasts in the architecture between different parts of the complex, nowhere more apparent than in the looters' trenches that penetrated many of the buildings. Some of these exposed several successive phases of construction, buildings set over and outside earlier ones like a nest of Russian dolls. The greatest complexity, and arguably the longest architectural history, were around the northernmost and highest

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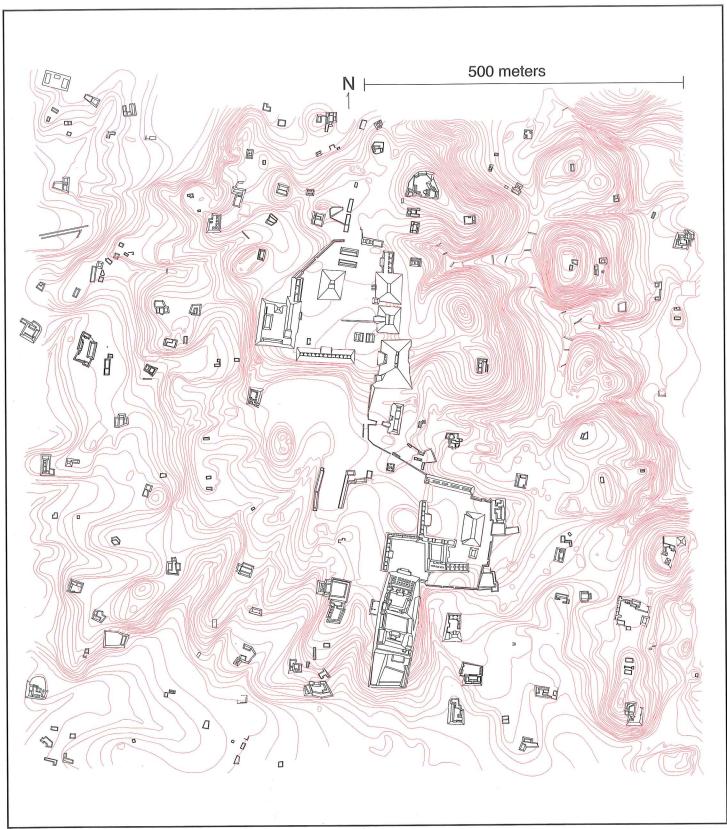


Figure 1. The central square kilometer of the La Milpa map, from the new GIS database (survey by Gair Tourtellot, GIS by Francisco Estrada Belli).

continued from page 11 courtyard overlooking Plaza C, bordered on its southern side by the high mass of Structure 38 (Fig. 2).

The looter's trench that, at the

beginning, looked like all the others had been tunnelled into the south side of Structure 38, overlooking the second and lower courtyard centered on Platform 120. The looters had gone in through a solid masonry wall, but then they had hit some rather odd infill, and also cut through a curious set of painted plaster faces, standing vertically off a brilliant red floor,

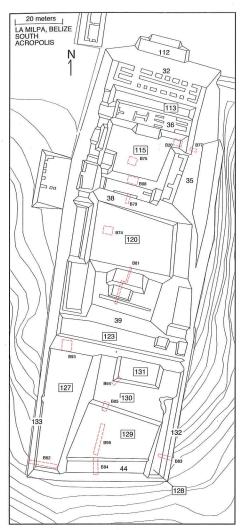


Figure 2. Outline plan of the royal acropolis, with the locations of the 1998 excavations. The triple throne in Figures 3-4 was found in Operations B79/88 in Structure 38. The area south of Platform 123 was never completed by the builders.

sparkling as the light caught the mineral grains of specular hematite. Careful cleaning by our laboratory director, Cynthia Pinkston, showed that there were three of these faces, all facing north and clearly built successively one in front of the other (Fig. 3). The earliest was painted in the same dark red as the floor, and turned back at a height of 70 cm (27 inches) to create a flat-topped bench 80 cm wide. The second was decorated in several colors, including a top covering the earlier one, its width increased to 1.1 m, grayish-green in color now, but perhaps once in the famous Maya Blue, an organic pigment made from the indigo plant. This second bench had possessed an overhanging

cornice, but this had been ripped away when the third, and latest, bench had been built some 30 cm in front of it, for a final width of 1.4 m.

This last phase had a deeper red front, and a top surface in a slightly different tone of gray-green; since the plaster surface was carefully smoothed to be continuous with the previous one, the Maya had probably tried to match the color too. The cornice of this final bench had also been partly removed, but a pendant trefoil in dark red remained to mark its center, allowing us to reconstruct the overall length of the bench at three m (ten feet: Fig. 4). Scorch marks on the bench top, on the floor in front of the bench, and on the raw surface where the front had been defaced showed that something—probably pom, the copal resin incense sacred to the Maya—had been burned there as part of the process of what seems to have been deconsecration, a removal of spiritual power.

During our investigation, it became clear to us that the looters had hacked right through and beyond this threefold bench, into the rubble that had subsequently filled the room and even through a wall beyond: as we cleaned up their mess, it also became apparent that the rubble was a deliberate packing, and the wall blocked a former doorway opening northwards. Just outside the blocking we found the remains of a fire of pine wood, kindled in the fragments of a pottery jar as a valedictory ritual, presumably carried out shortly after that devoted to the bench itself. We realized that we were in a chamber

buried by the ancient Maya with care and ceremony.

As we looked more carefully at the painted plaster faces surviving on either side of the looters' penetration, we saw that both the second and third phases of the bench were decorated with a tapering projection, painted in polychrome, and clearly identifiable from our simultaneous discovery in Structure 65 nearby (see the accompanying article, "Another Maya Throne Room," page 15) as the frontal decoration of a throne: the sealed chamber had once been the seat of power of the lords of La Milpa.

Why had they released the power in the throne by careful defacement and offertory, and then buried the entire chamber? Examination of the overlying layers of Structure 38 suggested that not only had another floor been added above, but a new south-facing terrace had been built on to the back of the building, switching its alignment from the courtyard to the north (Platform 115) to a newlybuilt one on the south (Platform 120). The south side of this court, in turn, was closed off by a massive palace structure approached by a broad stairway (Structure 39). Our long trench across this mound showed that it had supported a chamber with painted walls, which in turn had been blocked off and its approach reversed so that the final entry was from the south. What seems to have been a plain, red-painted bench faced this way, looking out over a series of terraces descending the slope to the southern limit of the acropolis.

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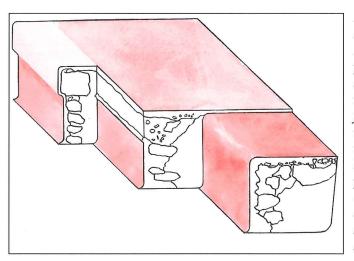


Figure 3. Reconstruction (by Candida Lonsdale) of the three painted thrones. The southern throne (at right) was constructed first, backing on to the rear wall of the throne room (which may also have borne decorated plasterwork), and covered by the later extensions; the top surface is less red than shown here.

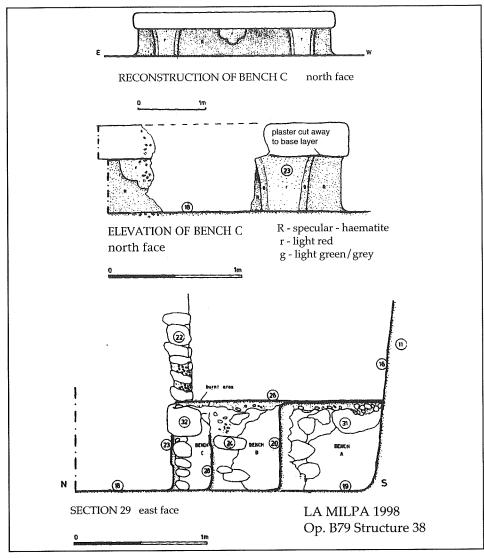


Figure 4. Details of the thrones, with a reconstructed elevation of the final and most elaborate phase.

continued from page 13

There was something strange about these terraces: no buildings stood on them. Even odder, lines of huge, rough limestone boulders lay across them in places, and far from being flat and level surfaces, some of them sloped downhill. As we cleared the undergrowth away, and then put in a series of probing trenches at strategic points, the mystery was resolved: construction had been suddenly interrupted, and never resumed. The entire area earmarked for the enlargement of the royal acropolis had been enclosed by a rubble bank, centered on an initial core of stone slabs; at the south end this used the pre-existing Structure 44 as an anchor, but the building itself was demolished to its foundations and covered with rubble. The great

boulders were freshly-quarried nearby, and laid out as the skeleton foundation for new terraces to level-up the natural slope of the hillside: on the east in Area 128 they were almost covered before work ceased, while to the west, in Area 127, work had scarcely begun.

We could chart precisely the intended progress of construction: at the north end of the new construction, backing on to Structure 39, the highest terrace, Platform 123, was complete, with the foundations of two small buildings at its eastern end. Abutting it was Platform 131, its rubble core in place, but the dressed limestone facing walls absent. Platform 130 was similarly incomplete, and some of its boulder foundations poked out in the southeast corner where the rubble fill still required a few more days' work.

Area 129 to the south was natural hillslope, but the base of Platform 130 lay at the same elevation as the top of the rubble bank overlying Structure 44, suggesting strongly that this was the next terrace to be constructed. At the south end of Area 127 was a small, deep hollow, which proved to be one of the guarries for the boulders: its walls were still fresh and vertical, preserved by a thick layer of trash which had been dumped into it after the required rock had been extracted; it would eventually have been buried completely in the final days of construction. Our colleague, Vernon Scarborough of the University of Cincinnati, suggests that during the interim period it would have collected rainfall runoff from the terraces, perhaps acting as a temporary reservoir to supply water for mixing mortar and plaster, and for the workmen.

The entire building program ceased, as though overnight. Given that it must have been under direct royal control, as a major expansion of the palace acropolis, it suggests a serious and sudden threat to La Milpa. Such an interpretation also begins to make sense of things we had noted elsewhere on the site: an elite residence, Structure 70, in a group just west of the acropolis, had been abandoned with a rebuilding program half-completed and a pile of unused small rubble in one of the rooms. The area between the Great Plaza at the north end of La Milpa's civic core, and Plazas B and C to the south were surprisingly undeveloped, and included open quarries, one with a heap of large blocks waiting to be moved. Finally, the fifth major templepyramid of La Milpa, Structure 21, which lies apart from the other large religious structures, on the east side of Plaza B, seemed on closer scrutiny this year to be unfinished: it had no frontal stairway, no temple on top, and no evidence for finely-cut masonry facing over its solid limestone rubble core. All this now suggests that La Milpa was in the middle of a major public-works program when it was abandoned, with construction in progress in Plaza B, in the temple group to which Structure 70 was attached, and, most significant of

Another Maya Throne Room at La Milpa

by Norman Hammond and Ben Thomas

This account of the discovery of another throne room at La Milpa is a companion article of Norman Hammond's report on the royal acropolis in this issue of Context, beginning on page 11.

The palace acropolis of La Milpa is surrounded on three sides by a series of large ruins, each consisting of a central courtyard enclosed by a number of platforms. From their scale and configuration, and their resemblance to elite residences at other Maya cities, we interpreted them as precisely that—the homes of La Milpa's upper class. In 1996 we had excavated the Structure 69 Group, on the western side of the acropolis, and come up with exciting but unexpected results: the main

courtyard had a longer history than we suspected, and below a small temple of the final period was buried an impressive stone-walled building with its floors painted a deep red. It had been deliberately demolished and filled in, and the temple, in similar plan to others of the ninth century A.C. raised on top of the resulting podium. A smaller courtyard on the southern edge of the group was bordered by a long, stone-walled house with a vaulted roof (Structure 70) with several burials in its interior:



The polychrome plastered throne found in Structure 65.

all in its implications, in the palace acropolis: what ceased were not peripheral programs, but activities affecting the conduct of the most central aspects of royal life at La Milpa.

Why did this happen? The short answer is that we do not know: there are no overt signs of invasion or destruction—in both Structures 38 and 65 (discussed in the companion article on this page), the burial of the painted thrones was deliberate and ceremonious. The lack of squatter occupation in the buildings we have been able to study suggests not just

a collapse of the elite, but a dispersal of the population as a whole. The "Classic Maya Collapse" is a perennial theme in our discussions of the trajectory of Maya culture from its origins in the second millennium B.C., through its apogee in the period between A.D. 200 and 900, to its dissolution in the face of Spanish conquest and European diseases in the sixteenth century. Here at La Milpa that collapse seems to have happened swiftly, not slowly: the city went out with a bang, not a long-drawn-out whimper.

this, we found, had been undergoing "home improvements," left half-completed when it was abandoned.

This year we decided to examine what we hoped was a more "typical" elite compound: the Platform 151 Group had a single courtyard with a single large C-shaped mound, Structure 65, which we took to comprise three collapsed buildings facing on to a raised terrace, with a stair down into the courtyard on the fourth, northern, side. We followed an initial test pit in the courtyard with a trench into the terrace and then a larger trench across the central part of the mound. As a result, it became clear that (unlike the situation in the Structure 69 Group) there was only one major period of construction. Structure 65 had been a substantial and impressive building, with painted and molded plaster decoration on its façade, its floors colored with sparkling, deep red specular hematite, and its wall, which survived above head height in places, pale red except round the doorways and at their bases, which were outlined in darker

The excellent condition of the main range, which had two long rooms set one behind the other, was a result of the buildings having been deliberately filled in, just as Structure 69 was. Here at Structure 65, however, this had also resulted in the preservation of something unexpected and spectacular: a complete, polychromeplastered Maya throng. It stood in the rear room, a solid mass of rubble masonry some 4 m long, 1.3 m wide and 60 cm high. The top, like the floor in front, was in red specular hematite, with scars at each end showing where upstanding armrests had been torn away. The front had an overhanging cornice painted in Maya Blue, and the lower recessed area was red. Standing out at the center was a modeled pendant trefoil in specular red, and two other trefoils marked the tops of tapering modeled areas outlined in blue which reached from cornice to floor.

These were probably the most surprising elements of all: they were plaster imitations of the stone legs continued on page 16



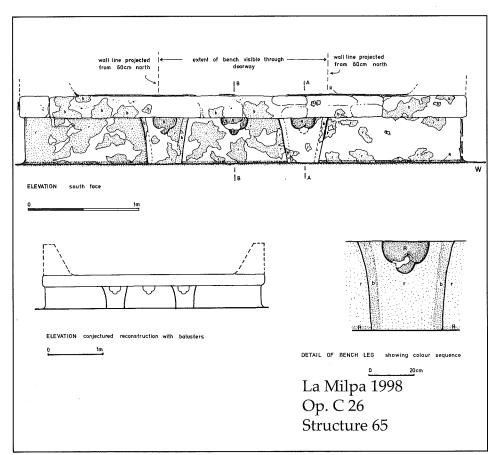
A Maya ruler on his throne, from a pottery vessel found in Tikal, Burial 116 (about A.D. 735).

continued from page 15 which supported Maya thrones in palaces at sites such as Palenque and Piedras Negras. They were positioned so that somebody looking into this inner chamber from outside, through an inner doorway narrower than the outer one to funnel and focus attention, would see the artful illusion

of a freestanding throne.

Stylistically this throne is very similar to the third and final example in Structure 38, sharing the same color scheme, the same false legs and the same central pendant trefoil: but if it was in use at the same time, did it represent a separate, detached audience chamber for the same ruler? Or did La Milpa, like Copan in its last decades, share the symbols and perhaps also the realities of power between the ruler and his high nobles? The deliberate demolition and burial of Structure 65, as at Structure 69, suggest complex shifts of power at La Milpa in the decades before the sudden abandonment of the massive royal construction program on the South Acropolis, and of the city itself.

Norman Hammond is Professor of Archaeology at Boston University and codirector of the La Milpa field project in Belize. Ben Thomas is a graduate student in the Department of Archaeology at Boston University.



Excavation plan of Structure 65, showing the two rooms in the central block with the throne against the rear, south wall. The inner doorway is slightly narrower to focus attention on the throne and its occupant.

Visiting Faculty Appointments

rancisco Estrada Belli, who received his Ph.D. from Boston University in May 1998 in Archaeology, was appointed Visiting Assistant Professor to teach AR505 Regional Archaeology and Geographic Information Systems during the spring term, 1999. During the summer, 1999, he will teach AR 101 Introduction to Archaeology.



Francisco Estrada Belli.

Further Reading on La Milpa

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Antiquity 72: 831–837.

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1995 A Mapper's Experience in Belize. *Context* 12 (1–2): 10–13.

odolfo Fattovich, an eminent archaeologist and pre-historian of Northeast Africa from the Istituto Universitario Orientale in Naples, Italy, is Visiting Professor, coteaching AR513 Studies in African Archaeology with Professor Kathryn Bard during the spring term, 1999. He is co-director with Professor Bard of the Aksum project in Ethiopia; see Context 13:3-4 (1998) 16-18.



Professor Fattovich (right) chats with Professor Francisco Estrada Belli at a reception held in the fall of 1998 to welcome graduate students in the Department of Archaeology. Professor Kathryn Bard is in the background.

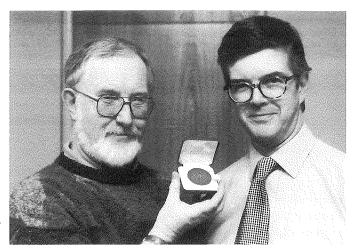
Igel Goring-Morris, a Senior Lecturer in the Department of Prehistory, Institute of Archaeology, Hebrew University, Jerusalem, was a Visiting Professor in the Department of Archaeology at Boston University during the fall term, 1998. Dr. Goring-Morris who has published extensively on prehistoric archaeology of the Near East, taught AR532 Prehistory of the Near East.



Nigel Goring-Morris (left) chats with Julie Hansen (center), Chair of the Department, and Tracey Cullen, Associate Editor of the American Journal of Archaeology.

Honors for Norman Hammond

Norman Hammond has been honored as co-recipient of the British Archaeological Press Award for 1998. Sole winner of the first such award in 1994 for his reporting on archaeology for The Times of London, Professor Hammond shared this year's prize with the newspaper itself, which, the citation said,



Norman Hammond (left) holds the British Archaeological Press Award medal for 1998 he and The Times received in November 1998. George Brock, Managing Editor for The Times is at right.

"outprints all other newspapers in terms of archaeology column-inches by an order of magnitude. The 1998 Press Award for newspaper coverage therefore goes to *The Times*, with which we must couple the name of Norman Hammond." A medal and certificate were accepted at a ceremony at the House of Lords in London on November 19 by the Managing Editor of *The Times* on behalf of Professor Hammond, who had class commitments.

In July 1999 Professor Hammond will receive the Honorary Degree of Doctor of Science from the University of Bradford, England, for contributions to scientific archaeology. He was the senior lecturer in the new School of Archaeological Sciences at Bradford when it was founded in the 1970s, and has since served on its advisory panel. While there, he collaborated in pioneering research on neutron-activation and X-ray fluorescence analysis of Maya pottery and jade.

New Grant Supports Proposal to NASA

he J. M. Kaplan Fund has awarded the Center for Archaeological Studies a grant of \$20,000 to help in the development of a proposal to create an archaeological program at NASA. The principal investigators, Professors Farouk El-Baz and James Wiseman, directors respectively of the Center for Remote Sensing and the Center for Archaeological Studies, head an inter-institutional committee formed from among participants in the conference on remote sensing in archaeology that they hosted at Boston University in April, 1998; see *Context* 13:3–4 (1998): 12–14. That conference was also made possible by a grant from the J. M. Kaplan Fund.

The plan to approach NASA was developed in response to a suggestion during the conference by Earnest D. Paylor, II, who is head of NASA's Earth Sciences Program. Resolutions urging the creation of such a program, which would facilitate access for archaeologists to remote sensing research activities at NASA, have now been passed by the governing boards of the Archaeological Institute of America, the Society for American Archaeology, the Society for Historical Archaeology, and the archaeology divisions of the American Anthropological Association and the American Association for the Advancement of Science.

Sacred Landscape and Settlement in the Sibun River Valley of Belize

by Patricia A. McAnany and Ben Thomas

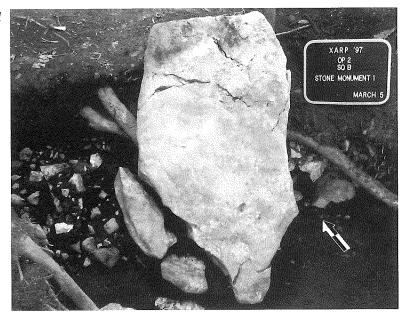
Patricia A. McAnany, Associate Professor of Archaeology at Boston University, is codirector of the Sibun (=Xibun) Archaeological Research Project (XARP). Co-director with her in 1997 was Professor Robert Mack of the University of Alaska, an anthropologist as well as an exercise physiologist and nutrionist. The authors note that "Professor Mack monitored our camp cuisine, bandaged our wounds, and provided support and inspiration for all." Other members of the 1997 staff included surveyors Brian Norris, Vice President of Surveying and GPS at the James Sewell Co., Old Town, Maine, and Lewis Bowker, staff engineer at Schofield Bros., Framingham, Massachusetts, assisted by Joseph Nigro, an alumnus of Boston University's Archaeology Department. Boston University graduate students serving as supervisors were Kimberly Berry, Ilean Isaza, and Ben Thomas, the co-author of this report. Twelve undergraduate students in the Boston University Field School participated in all activities of the project.

aves, cacao, and Christianity were to be the focus of our ≠investigations in the Sibun River Valley, as indicated in the title of our prospectus on field work planned for 1997, published in Context 13:1–2 (1997): 6–7. We now can report that during six weeks of field work in February and March, 1997, we carried out reconnaissance and in-depth mapping of cave chambers in the massive and rugged Sibun-Manatee cone karst, which revealed the high frequency with which almost inaccessible cave chambers had served as settings for ritual practice. We are also pleased to report that the middle section of the valley, previously an archeological terra incognito, was once teeming with Classic-period settlement, and we are working on new approaches to identify evidence of cacao cultivation. The only disappointment of the 1997 field season was the realization that the Colonial period mission chapel or visita (about A.D. 1600) known from archival sources had not been located in the middle part of the valley, in an area now called "Churchyard." An exhaustive interview with land surveyor Nick Sutherland, now retired, elicited the fact that the Churchyard area received its place name in the mid-1800s. At that time, the area was a cattle ranch. As the story goes, on one particular Good Friday, a ranch hand went to the pasture by the river to check the cattle and later reported that all the cattle had been kneeling down on their front legs, apparently in observance of Good Friday! He remarked that the pasture looked like a "Churchyard" and the name stuck. We now believe that the mission was located in the upper part of the valley, probably near the location of the largest *cacao* orchard in Belize today (planted about forty years ago by the Hershey Co.). The search for the mission will continue during the upcoming field season.

As we gathered supplies for the spring, 1999, season, we naturally took stock of what we learned during 1997 and planned our field strategy for 1999. In this report, we present some of the highlights of 1997 and

An eroded and broken stela from Pechtun Ha. Note cobble fill of platform in background. outline things to come. Our pilot season on the Sibun, 1997, was tremendously productive. We were headquartered at the rustic Monkey Bay Wildlife Sanctuary (solarpowered, rain-water dependent, and featuring the infamous "bio-gas" latrines). Our hosts, Matthew Miller and Marga Waals-Miller, are keenly interested in our archaeological research and its links to the Sibun Watershed Association, a grass-roots organization formed by local inhabitants desirous of maintaining the biological and cultural resources of the watershed.

After the staff was acclimatized to the tropics, we set about surveying the northern side of the river valley near the wildlife sanctuary. With the help and guidance of local residents, Alec Estrada and Pedro Reyes (now deceased), and exhausting trail cutting by skilled machete users— Don Ramon Placido, Samuel Ortiz, Desmond Young, and Gary Clarkwe discovered two new archaeological sites: Pechtun Ha and Yax P'otob. Although the bulk of ancient platform construction at Pechtun Ha was earthen, one stone-covered platform and two stone monuments (probably an eroded stela and altar) were discovered at this site. Situated on majestic high ground overlooking a curve of the river, the site sounds like paradise, right? It was—except for the fact that half of the site was covered with twenty-foot-tall spiny bamboo plants that, when disturbed



by the swing of a machete, released a rain of nearly microscopic ticks. These three features of the site—ticks, stone, and water—provided the inspiration for the site name, *pech-tun-ha*, which is simply the words for these three facts of nature in the language of Yucatec Mayan.

To the west of Pechtun Ha, we discovered another site which we named Yax P'otob, Yucatec Mayan for "green beads" because the small residential platforms of this settlement were strung along a terrace edge like jade beads on a necklace. More felicitous in terms of insect inhabitants, Yax P'otob had only one drawback to investigation. The quickest approach to the site involved crossing a deeply incised stream. We soon realized that after a tropical rainstorm the earthen side walls of the ravine through which it flowed turned into a treacherously steep mud slide.

Test excavations at both Pechtun Ha and Yax P'otob yielded pottery of the Late Classic Period (A.D. 650-850) and evidence that the Xibun Maya (using the older spelling found in archival documents) were wellsituated in the long-distance trade of obsidian (20 fragments of obsidian prismatic blades were recovered, from only four test units). No direct evidence of cacao cultivation was recovered but that came as no surprise. The chocolate tree is notoriously difficult to detect archaeologically because of the minimal amount and small size of its pollen grains (it is pollinated by midges) and the fact that, because the soft pods and beans were rarely carbonized, they are seldom preserved in archaeological sediments of the humid tropics. Documenting the location and intensity of cacao farming remains one of the challenges of this research and we are exploring various physio-chemical and remotesensing methods that might provide helpful solutions (and we welcome any ideas and suggestions that Context readers might have in this regard).

As part of our team confronted the ticks and snakes of the terrestrial realm, another part headed straight for the cave openings, perceived by

many Maya of today (and certainly the past) as portals to the Underworld—places of ancestors, deities, of death and regeneration (Stone 1995). Cosmologically charged locations, caves were part of a sacred landscape to the Classic Maya (Brady 1997). This perception has long been understood in Maya studies, but until recently archaeological research in the many caves of the Maya lowlands was viewed as a "fringe" area of archaeological inquiry. Consequently, the integrity of many cave deposits has been compromised because of unscrupulous collecting by looters, spelunkers, and ritual enthusiasts.

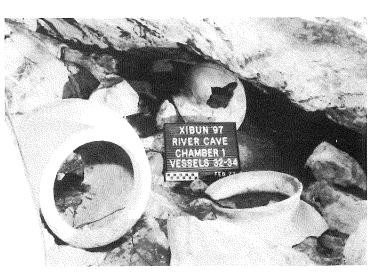
The cave-ridden Sibun-Manatee karst represents a vast sacred landscape located virtually on the

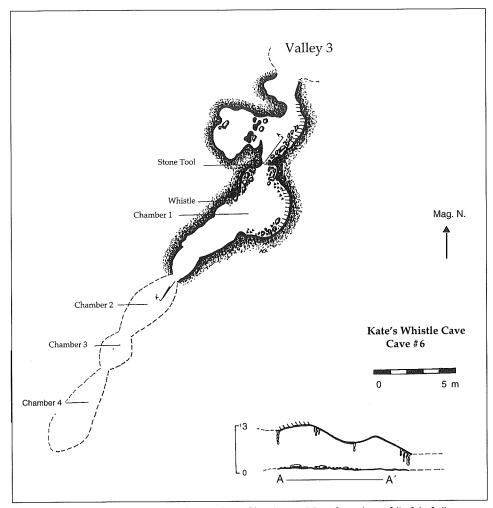


Top: Pottery vessels discovered in a chamber of Pottery Cave which was difficult of access. Many exhibit wear marks and food residue from previous use, and some were ritually killed with a drilled hole. Right: Vessels and nail fragments from a small chamber of River Cave.

doorstep of the Xibun Maya. Our only problem was deciding where to start. This problem was soon solved when local land owner, Steve Downard, and avocational caver, Bruce Cullerton, offered to introduce us to the nearby caves of Tiger Sandy Bay. From this initiation, we came to discover that cave chambers in selected locales contained rich artifactual materials. primarily pottery. Cave chambers with archaeological materials, moreover, invariably are situated in locations difficult of access, deep within these portals to the Underworld. Remains of wooden torches, pottery vessels with kill holes, and deposits of smashed vessels indicate the ritual context of cave use.

raving assassin bugs and lowflying bats awakened from day-time slumber by the movement, noise, and head lamps of the research team, Boston University graduate students Ilean Isaza and Kimberly Berry led a team of students into the caves. After reconnoitering a cave system for chambers containing archaeological materials, we then set about mapping the caves using a tape, a compass, and a stadia rod. Measurements for both plan and profile views were collected and maps were drawn and field checked while in the field. Field school student Amalia Kenward prepared the inked versions of the cave maps and became so intrigued by these features of the sacred landscape that she has enrolled in the 1999 field school session in continued on page 20





Kate's Whistle Cave shown in plan and profile views. Note location of "whistle" (actually a flute) near west hall of Chamber 1.

continued from page 19 order to collect information upon which to base her Senior Independent Work for Distinction. All artifacts encountered within cave chambers were recorded, described, and illustrated in situ. Complete vessels were individually photographed as were complete pottery assemblages within each chamber. The intent of this fieldwork was to document all artifacts in situ, thus leaving the ritual cave deposits intact. Recent looting of caves within the study area, however, compelled us to collect and remove to safety the small, portable artifacts particularly sought by looters.

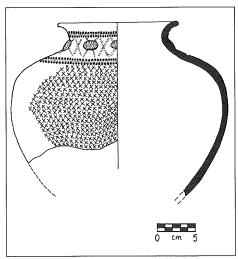
During one episode of cave reconnaissance, Boston University field school student Kate Frentzel discovered a musical instrument lodged in the side wall of a small cave. Initially, we called it a whistle until Rafael Reisz, a visiting computer systems analyst, demonstrated to us

that the instrument was multi-tonal and therefore a flute. We also determined that the broken, bulbous end of the instrument represented the remnants of a maraca or rattle. This compound instrument had been finished with a glossy red slip. Archaeologist Paul Healy, working at the site of Pacbitun (about 100 km west of the cave), had found a similar instrument in the Late Classic tomb of an elite female (Healy 1988). This discovery brought the caves alive acoustically to us as we imagined cave rituals accompanied by the haunting notes of the flute and the percussion of the maraca.

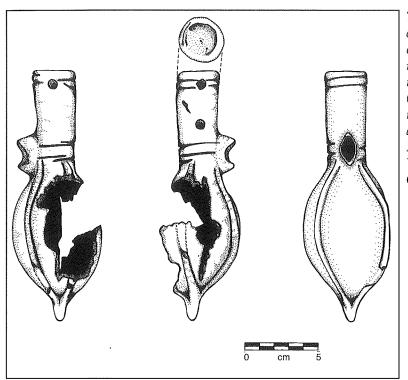
This spring (1999), we headed back to the Sibun Valley with some very specific questions relating to the interaction between landscape and society. We first ask whether the Sibun River drainage (more than a hundred kilometers long) was an integrated unit—politically, socially,

and economically—or, conversely, whether significant differences may be detected archaeologically to suggest that the inhabitants of the upper reaches of the valley, for instance, moved in a different sphere from those of the middle and lower reaches of the valley. Can we document a pattern of settlement expansion within the valley, and can that expansion be linked to an increased demand for cacao, as a luxury item, during the Late Classic period? In order to answer these questions, we have developed a longterm plan of research that entails intensive survey, mapping, and excavation of settlement locales in portions of the upper, middle, and lower river valley. This field season entails archaeological survey in the middle and lower reaches of the valley, map-making and testexcavations at the Samuel Oshon site near Freetown Sibun and at the site of Pechtun Ha (the latter is located on the Monkey Bay Wildlife Sanctuary and was mapped during the 1997 field season). The Samuel Oshon site—a two-courtyard center with standing stelae and approximately 75 associated residential platforms—is located at the valley transition between high river-levee land (suitable for cultivation) and low banks on which only mangrove trees can survive.

A second query, one that drives to the heart of Maya cosmology, is focused on Maya cave use. Cave



Late Classic pottery jar from Tiger Cave showing a profile view and wall thickness on right and surface decoration on left.



Three views of the compound musical instrument (flute maraca) discovered in Kate's Whistle Cave.

rituals can be undertaken for a number of reasons. Can we associate specific types of cave deposits with discrete rituals, or did repeated use of cave chambers for different rituals homogenize cave assemblages? In a landscape-specific sense, did the dynamic hydrology of the Sibun River—prone to five to eight overbank events per year—lead to a local emphasis on rituals to placate Chak, the mercurial rain deity? Another query related to cave use refers to the scale and social composition of cave rituals. That is, can we determine whether the ritual events held in the cave chambers of the Sibun-Manatee karst were organized by households or polities? And were these caves the exclusive domain of males as Brady (1989) and others have suggested? One of the hieroglyphic texts (Drawing 82) painted on the North Passage of Naj Tunich cave records the presence of a lord from Caracol (over 75 km distant) who, along with representatives from other Classic Maya capitals, attended a fire-bearer event within the cave (MacLeod and Stone 1995:179). This evidence suggests that some cave rituals were integral to high-level political integration. On the other hand, geochemical study of speleothems from residential contexts by Brady and

others (1997) suggests the possibility that residential groups may have maintained ancestral links to specific cave systems.

These questions can be addressed through detailed mapping of caves and their constituent artifact-bearing chambers. Key to understanding this ritual landscape, such field work was initiated during 1997 and will be expanded during the 1999 field season. An estimated fifteen caves will be documented and an additional twelve reconnoitered. Detailed in situ recording of artifacts within chambers (including artifact illustration, description, photography, and sampling for residues on pottery) will be undertaken in order to document cave assemblages. This study will also detect differences in cave artifacts that might refer to localized patterns of cave use, potentially quite variable among the upper, middle, and lower stretches of the valley.

An innovative aspect of this project entails the complete integration of an investigation of sacred landscape utilization with that of settlement. In the past, cave studies were often isolated from the study of where people lived. This separation engendered a view of Maya cave studies as a marginal and esoteric aspect of Maya lived experience. With our

integrated approach, we will be able to link ritual practice with other aspects of daily life—economic, political, and social—that are revealed by investigation of Maya settlements.

We hope also that the project will contribute substantially to our understanding of a key luxury crop grown by the Xibun Maya—cacao. A critical element in the Classic-period politics of feasting, cacao is the beverage mentioned most frequently on the hieroglyphic texts of cylindrical polychrome vessels, yet virtually all of our information on cacao production and trade comes from Postclassic accounts. As discussed above, cacao cultivation does not leave behind easily collected archaeological traces, but little serious effort has been expended upon developing techniques for the recognition of cacao production areas (see Muhs et al. 1985 for an important exception) or, for that matter, on documentation of Classic-period settlement areas perceived as crucial to the supply of cacao to Classic-period elite households. This project will provide such documentation and will also work to develop physio-chemical and remotesensing techniques for detection of direct material evidence of cacao production.

The 1999 field season combines research and training with an undergraduate field school integrated into an ongoing research project. The team is led, once again, by Professor Patricia A. McAnany. Thirteen highly motivated, undergraduate students from Boston University, Vasser, Princeton, Grinnell, Wheaton, Bates, and the University of San Diego have been chosen to participate in a semester-long program of total immersion into archaeology. Enrolled through the Division of International Programs at Boston University, these students receive training from an experienced staff of Boston University graduate students including Ben Thomas, Steve Morandi, Polly Peterson, and Ellie Harrison, all of whom are developing dissertation projects in conjunction with this research. Leanne Stowe a graduate of Durham University, is directing the

continued on page 22

continued from page 21 field laboratory and Lewis Bowker and B.U. graduate Sean Downey, returned to assist in the instrument survey headed, once again, by Brian Norris. John A. Labadie, chief project illustrator and Professor of Art at the University of North Carolina, Pembroke, has returned to illustrate artifacts and cave chambers and to train students in archaeological illustration.

The significance of the proposed research for cultural heritage management can not be understated. Modern development within the Sibun River Valley is threatening to erase the ancient Maya settlement signature. Re-establishment of orchard agriculture (predominantly citrus) is taking place at an accelerated rate and heavy equipment is being utilized to clear the rain forest. The Western Highway is adjacent to areas of the middle and lower valley, and residential subdivisions are currently under development there. If settlement data are not collected during the next five years, only smears of artifacts between orange trees and house lots will remain for future archaeologists to interpolate ancient settlement. This impact on the valley is matched by accelerated looting within the caves which is compromising our ability to understand the rituals undertaken within these portals to the Underworld. Prompt documentation of cave deposits and the removal of small, portable artifacts to the capital at Belmopan is of the utmost urgency so that we may come to a fuller understanding of sacred landscape and settlement within the Sibun River valley.

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Annual Open Forum for Graduate Students

The 4th Annual Open Forum for Graduate Students was held on October 31, 1998. The theme of the conference was "Animal, Vegetable, Mineral: Using Specialist Studies in Archaeological Interpretation." The keynote speaker at the conference was Professor Clive Gamble, Department of Archaeology, University of Southhampton, who spoke on "Archaeological Specialists in the Next Millennium: a Palaeolithic Point of View." Graduate student participants were from Arizona State University, Boston University, Cornell University, Harvard University and the University of Minnesota.

The forum was sponsored by the Archaeology Graduate Students Association and the Department of Archaeology at Boston University. Generous support was provided by the Humanities Foundation of Boston University. Printed materials for the conference were provided by the University Credit Union.



Professor Gamble (seated second from left) discusses how aerial photographs of archaeological sites reveal features seen in no other way. Student participants seen here include Alexia Smith, Alexandra Chan, and Jimmy Schryver. Standing left to right: Clint Chamberlain, Trina Arpin, Britt Hartenberger, John Soderberg, Tugba Tanyeri and Daniel Welch.

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Boston University's Archaeological Field School in the Outer Hebrides

by Mary C. Beaudry and James Symonds

The Flora MacDonald Project, began in 1995 under the direction of Mr. James Symonds, Director of the Archaeological Research and Consultancy at the University of Sheffield, England. It is an interdisciplinary investigation of the landscape and post-medieval settlement history of the Hebridean Island of South Uist, focusing on the early eighteenth-century township of Milton, the birthplace of Flora MacDonald, heroine of "the '45," the Scottish Jacobite uprising of 1745 that ended in 1746 with defeat of the Scottish rebels by English forces at the battle of Culloden.

The life of Flora MacDonald, perhaps the most famous of Scottish heroines, was chosen to provide a thread linking the various elements of the research. Flora is credited with saving the life of "Bonnie Prince Charlie" (Prince Charles Edward Stuart) by taking him in disguise from South Uist to safety on the Isle of Skye in 1746. Her life, indeed, spanned a turbulent period of history, a time during which the Highlands were irrevocably transformed. The defeat of Jacobite forces at Culloden added momentum to a train of events that led to the breakup of the clan system. Absentee landlords sought to subjugate and civilize the unruly clans—the "wild Scots"—by imposing new methods of estate management. The adoption of agrarian capitalism led to a radically different attitude towards landholding. New patterns of rental emerged in which traditional common lands were enclosed, and tenants and cattle were displaced in favor of more economically profitable activities such as sheep ranching. Clan-based society, faced with the onset of the Industrial Revolution and the new forms of agriculture that came with it, was doomed.

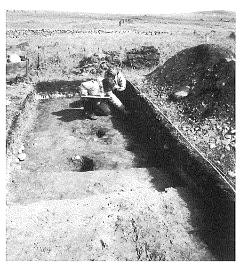
On South Uist the period 1743–1817 brought an industrial revolution of its own, in the form of a flourishing kelp industry. Kelp, an alkali seaweed extract used in the manufacture of soap and glass, was in heavy demand during the French Wars, when foreign sources of barilla, a cheaper and richer alternative, were denied to English markets. The abundant supply of seaweed and the availability of cheap labor led to feverish activity in the Uists. Production of kelp from the Hebrides peaked in 1810, and the region came to depend upon the success of this product. At the end of the Napoleonic Wars, however, when foreign trade routes reopened, kelp plummeted in price. This short-term bonanza in the end benefited the island population very little, because farmers had been diverted from agricultural tasks to serve as laborers in the kelp industry. Landlords controlled the manufacture and marketing of the kelp and raised rents to offset the wages paid to the laborers who had left their farm work behind.

The demise of the kelp industry coincided with the onset of the potato blight, and this led to widespread famine. Landlords sought to eliminate excess population and increase profits through sheep ranching. Growing demographic pressure, commercialism, the cycle of economic boom and collapse, and the rise of landlordism all contributed to the need for a more permanent solution to seasonal shortages. The temporary migration of Highlanders searching for work outside the region initiated a trend of voluntary emigration. Permanent outmigration began in the 1770s, when many of the tacksmen (who under the clan system were village head men, but were excluded from the new system of farming) chose to leave, and reached its peak in 1851, when several hundred of the most destitute inhabitants of South Uist were evicted from their homes and thrown onto ships headed for New Scotland-Nova Scotia-in Canada.

The Flora MacDonald Project is investigating the pre- and post-

Clearance (the Highland Clearances refers to the forced removal of people from the land) landscape, settlement history, and material life of Milton, South Uist, through instrument-based landscape survey, detailed survey of individual structures at surface level, and test or "keyhole" as well as widearea excavations. It has a North American parallel in the Highland Settlers Project (coordinated by the University College of Cape Breton and the Nova Scotia Highland Village Society), which seeks to understand how life changed for the many thousands of islanders who left the Hebrides for the New World.

A Boston University team joined the Flora MacDonald Project in its fourth field season in 1998 to assist in the investigation of changes wrought by the introduction of Lowland systems of land managementaccomplished in large measure through the placement by English landlords of Lowland Scots managers on their Hebridean estates—through survey and excavation on the grounds of Milton House (a Lowland-style house built for the incoming Lowland Scot farm manager about 1800). The Boston University field school, under continued on page 24



Field school student Sarah Hayes discusses stratigraphy with an Earthwatch volunteer in a test trench that exposed a portion of a cobble track-way across the front garden at Milton House. Photo by Mary C. Beaudry.



Boston
University
field school
students
Ninian Stein
(left) and
Sandra
Buerger record
a field drain at
Milton Farm
during the
1998 field
season. Photo
by Mary C.
Beaudry.

continued from page 23 the direction of the author, worked with Sheffield archaeologists and two Earthwatch teams to conduct a closeinterval resistivity survey in order to pinpoint anomalies in the front garden of Milton House. They also excavated carefully placed test trenches, which revealed extensive landscaping, in the form of drainage ditches, terraces, and a cobble trackway, as well as a large dump of household refuse dating from the early to mid-nineteenth century. Other activities of 1998 season involved excavation and recording of a large stone-built corn dryer built at Milton Farm in the third quarter of the nineteenth century as well as test excavations at Garryvaltos, a late medieval settlement.

In 1999 the field school will begin on June 12 and run through July 24.

During this field season we will continue to explore aspects of Milton Farm and, we hope, initiate excavations at Ormaclate Castle, a grand house built by the Clanranald chief about 1706 and destroyed some twenty years later in a disastrous fire. For further information and applications, contact Boston University International Programs, 232 Bay State Road, Boston, MA 02215; phone 617-353-9888; fax 617-353-5402; e-mail: abroad@bu.edu; World Wide Web: http://www.bu.edu/abroad.

There is still time to apply for admission to Boston University's Field School during the Summer 1999 in the Outer Hebrides!

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