



# The Ban Chiang

## Newsletter for the Friends of Ban Chiang

# UpDATE

Preserving a **UNESCO** World Heritage Site Issue #17 Spring 2010

## From the Director

by Joyce C. White

Towards the end of the MMAP 2010 field season in January, I received an unexpected e-mail—an invitation to the opening ceremony of the new Ban Chiang National Museum. Not just any old opening ceremony, but one presided over by Thai Crown Princess Sirindhorn, and I was to be one of the honorees. Although rerouting from Laos an already purchased airline ticket for home was not an easy task, when a princess calls (figuratively speaking) extra effort is a must! I extended my stay in Southeast Asia for ten days and traveled overland to Ban Chiang from Vientiane the day before the event to spend the night at the house of my long-time dear friend Angkhana

Boonpong. The following morning, I got out of bed early (5 AM) to get spiffed-up, practice the intricacies of proper curtsying to a Thai princess at the royal reception tent, and finally attend the ceremony at 8:30 AM.

The ceremony recognized some of the dozens of individuals who in some way contributed to the new Museum. Angkhana explained that one of the reasons I (and, by implication, the University of Pennsylvania Museum) was recognized was for the role ongoing international research plays in creating and maintaining a

vibrant and living public museum at the Ban Chiang site.

But before we fill you in on the details of the year's activities, I would like to muse on the importance of the Ban Chiang Museum. Long before UNESCO named Ban Chiang in 1992 a "World Heritage Site," there has been some sort of "museum" at Ban Chiang since the 1970s, even if only a few rooms with some pots. Since few excavations are ever graced with site museums, this precedent was an early sign of recognition

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Her Royal Highness Crown Princess Sirindhorn of Thailand gives Dr. Joyce White an honorary pin in recognition of her scholarly contribution to understanding the Ban Chiang archaeological site and prehistoric culture.

Pisit Charoenwongsa, Joyce White, Angkhana Boonpong, and Stephen Young stand in front of the new Ban Chiang National Museum, Thailand.



**F•O•B•C•**

University of Pennsylvania Museum of Archaeology and Anthropology  
3260 South Street, Philadelphia, PA 19104-6324  
[penn.museum/banchiang](http://penn.museum/banchiang) and [penn.museum/mmap](http://penn.museum/mmap)

that preserving and explaining Thailand's archaeological heritage was a worthy activity. When the Smithsonian-produced travelling exhibition "Ban Chiang: Discovery of a Lost Bronze Age" completed its U.S. and international tour in 1987, it was sent to Thailand, where the John F. Kennedy Foundation provided funding for an attractive new museum building to install the exhibition and supplementary displays. For more than 20 years, the Smithsonian exhibit, which I curated, served a growing local tourism sector. The Museum stimulated economic growth, with small stores and restaurants sprouting up in a village where previously no commercial establishments had existed. To give you a sense of the scale and speed of change, when I lived in Ban Chiang in 1979-81, the nearest phone was more than an hour away and required a two-hour wait to use, but today there is an ATM at the Museum entrance!

At some point in the past decade, the Thai government decided to make a huge investment—millions of dollars—in a stunning, state-of-the-art archaeological museum at Ban Chiang. Visitors can now walk through a reconstruction of the Ban Chiang dig, complete with mannequin of Chet Gorman sporting a long pony tail and taking a photograph, reconstructed labs, and thorough, well-exhibited, and well-written discussions of what has been and can be learned from the human skeletons excavated from the site. An element of which I am particularly proud is the reinstallation of most of the original Smithsonian exhibition. One villager calls those galleries "The Pennsylvania Rooms."

For an archaeologist, it does not get much better than this!

The regal ceremony at Ban Chiang in February came at the end of

three and a half successful months in Southeast Asia for the MMAP 2009c/2010 season. During this time, we did a lot of work with the Lao team on our MMAP database, prepared 8 PowerPoints for the IP-PAs in Hanoi, conducted a two-week excavation at Tham An Mah with an international cast of participants and specialists, and did post-excavation work in Luang Prabang.

Flying home included being stuck two nights in Los Angeles, as the Philadelphia airport was closed due to yet another east coast snow-storm! Trudging through the brown slush the first couple of weeks back in Philly made me long to return to the tropics. ❖

*Joyce White,  
Director of the Ban  
Chiang Project*



## **Your FOBC Contributions at Work**

Friends of Ban Chiang contributions have supported the analysis and publication of the excavations conducted by Penn Museum and the Fine Arts Department of Thailand at Ban Chiang in the mid 1970s. Two major steps were taken in the past year, namely a peer-reviewed publication on the source of the early metals at Ban Chiang, and the design of a program by which the excavated ceramics will be scientifically studied.

Joyce and Elizabeth Hamilton published an important article this past year entitled "The transmission of early bronze technology to Thailand: new perspectives," in the *Journal of World Prehistory*, volume 22. This article reviews the earliest evidence for bronze at Ban Chiang and suggests a source for the technology

from central regions of Asia based on chronological and technological evidence that Joyce and Elizabeth have been analyzing for several years. These analyses, supported by Friends of Ban Chiang over many years, are positioning the significance of the Ban Chiang metals in the context of global prehistory. The article is stirring the scholarly pot as rebuttals are already in press!

Ban Chiang ceramic research is an extremely important part of the Ban Chiang research program. These scientifically excavated vessels hold the promise of telling us vast amounts about the ancient society, economy, and technology in this region, if studied with modern techniques. Although we have been doing small scale projects on the BC ceramics for years, how we were going to get the financial and human resources to do a study commensurate with the size and importance of the collection has taken decades of strategizing and planning.

The Luce grant and your contributions have allowed us to create the "Year of Ceramics," starting in late summer. The focus of our efforts will be the study of the Ban Chiang ceramics on loan to Penn from the Thai government. Luce and Penn are supporting several components of the program, including a Thai intern, a Lao intern (both here for 8-9 months), a post doc, a two-semester course in archaeological ceramics focused on Ban Chiang, and an international workshop on Southeast Asian ceramics. The workshop is jointly organized with the Smithsonian's Freer-Sackler Galleries. We plan to do petrography, xeroradiography, and other analyses to learn how and where the pottery was made, how widely it was traded, and how production was organized. *We could not do this important research without your help!* ❖

# MMAP in Hanoi

MMAP team presents  
papers at the Indo-Pacific  
Prehistory Association  
(IPPA) conference

by *Elizabeth Hamilton*

The Winter 2009c/2010 season started with a bang (or the blare of a car horn), as Joyce White, Bounheuang Bouasisengpaseuth, Ben Marwick (University of Washington), Helen Lewis (University College Dublin), and three additional Lao team members traveled to Hanoi for the meetings of the Indo-Pacific Prehistory Association (IPPA) in late November. The IPPAs are the most important conference meetings for Southeast Asian archaeologists in the world, with over 500 participants this year. These meetings occur only once every three to four years, so it was important that MMAP put on a good show.

For Lao team members Phousavanh Vorasing (Phou), Souksamone Sonethongkham (Pong), and Sengphone Keophanhya, international travel is a big adventure and Hanoi took some getting used to. The city has an estimated population of 6.5 million people, or almost as many people as in the whole of Laos. Sengphone, who had never before left Laos, found the lack of trees and mountains, the high rise buildings, the grey city, and the

chaotic traffic disturbing. Crossing streets required a phalanx of people each looking in a different direction for oncoming cars and motorbikes swooping in from everywhere.

Nonetheless, all gave fine PowerPoint presentations at the IPPA meetings. During the training season in the spring of 2009, MMAP participants were trained in rock type identification and stone tool recording. Using these data, Joyce and Pong discovered that there were real differences among MMAP sites in the kind of stone used for core tools—the first time anyone had ever numerically documented those kinds of distinctions in Southeast Asian hunter-gatherer sites, and



Some of the MMAP team at the IPPAs. From right to left: Souksamone Sonethongkham, Bounheuang, Joyce, Suereratana Bubpha, Phousavanh Vorasing, and Sengphone Keophanhya. Ho Chi Minh to the far left is an honorary MMAP team member for the photo!

Pong presented these findings. Sengphone, who works at the Palace Museum in Luang Prabang, gave a presentation on MMAP and Lao cultural heritage, concentrating on the MMAP training program for Lao cultural heritage staff.

Phou, in a talk that received praise from some senior archaeologists at the conference, reported on

the results of his ethno-archaeological investigation of shell remains uncovered in three MMAP excavations: Phou Phaa Khao Rockshelter, Tham Vang Ta Leow, and Tham Sua. Phou not only studied the shell species found archaeologically, he also conducted interviews in the street markets of Luang Prabang with women who collected and sold snails and other shelled species. By doing this, he was able to get an idea of the relative abundance and collecting season of each species found in the prehistoric sites.

None of these three young men had ever delivered a scholarly paper before, much less at an international archaeology conference. Joyce is very pleased that MMAP has been able to provide training in both scholarship and public communication as well as opportunities for participation in international scholarly circles. These may have been their first presentations at an international conference, but we are certain that it will not be their last.

Joyce and Bounheuang did not merely applaud their trainees' performances, however. Joyce gave an overview presentation on MMAP: its history, what it had accomplished so far, and its future plans. She noted that the MMAP surveys had documented 69 sites in the area

around Luang Prabang and test-excavated three rock shelters with dates ranging from the end of the Ice Age to the historic period. Bounheuang aimed his talk at archaeologists seeking to work in Laos, describing the requirements for obtaining excavation permits and MOUs (Memoranda of Understanding) from the

*continued on page four*

Lao government. Helen Lewis discussed the problem of how to predict which cave sites might contain undisturbed Hoabinhian levels in advance of excavation, and finally, Ben Marwick of the University of Washington gave a presentation on cave formation processes at Tham Sua, the site which MMAP excavated during July of 2009. All in all, we are very proud that the scholarly results of MMAP's years of work are reaching the world! ❖

# MMAP 2010

EXCAVATION AND RESEARCH  
AT THAM AN MAH CAVE

by *Elizabeth Hamilton*

The 2010 MMAP season was filled with variety, as a stream of international scholars, participants, and volunteers flowed in and out of Luang Prabang by plane, boat, and tuk-tuk. In July 2009, Joyce, Bounheuang, Ben Marwick of the University of Washington, Helen Lewis of University College Dublin, and several Lao team members did a short test excavation at a cave called Tham Sua, which had been discovered during the 2005 survey. The survey had found stone tools, along with human and animal bones and a variety of potsherds, so we knew it was a promising site. The test dig confirmed that the site contained a mixed iron age (around 600 B.C.-A.D. 300), and Hoabinhian (much earlier) deposit, with a great mix of sherds and stone tools from various periods.

In November 2009, Joyce, Bounheuang, Ben, Helen, and three additional Lao team members prepared and gave talks at the meetings of the Indo-Pacific Prehistory Association in Hanoi (see “MMAP in Hanoi” on page two). Then the crew, except for Ben and Helen, went to Luang Prabang, where December was taken up with analyzing stone flakes excavated at Phou Phaa Khao Rockshelter, Tham Vang Ta Leow, and Tham Sua. They worked hard—information on six thousand stone flakes was entered into the database!

At the beginning of January, almost all the field crew moved to the field camp outside the village of Ban Xieng Mouk in preparation for excavation. The field camp, the village “conference center,” was the most luxurious camp MMAP had ever used. Electricity! Cooks to prepare the food! TWO squat toilets! Actual bamboo-walled rooms with mosquito nets! The water wasn't running, but there was a large enclosed concrete tank for bathing, after you inspected the ground carefully for leeches. All right, it wasn't the Hilton, but it was far better than what most MMAP people



**Above:** Joyce White examines a pot found in Tham An Mah Cave.

**Right:** Elizabeth Hamilton demonstrates GIS maps to Thongsay Sayavongkhamdy (Director General of the Heritage Department of Laos) and MMAP team members.



were used to on site. The sounds of the guitar and singing went far into the night as the team enjoyed their time around nightly camp fires.

After the camp move, Joyce, Bounheuang, Helen Lewis, her student Patrizia La Piscopia, and most of the Lao team started excavation on a rockshelter site called Tham An Mah, which means “horse saddle cave.” This site had been used in historic times as a temple; remaining on the walls were paintings of seated Buddhas, along with some human and animal bones. Two test pits were excavated. The larger one was the most exciting—not far below the surface the excavators found a large, nearly intact jar, extensively decorated and probably dating to the iron age (around 600 B.C. – A.D. 300). There was also a large stone disk with a crushed but reconstructible pot underneath it. The intact pot was carried by shoulder yoke down to the field camp where it was excavated. It contained

the bones from three individuals, two adults and a baby. This was a secondary burial, i.e., the bones were gathered together long after death and placed in and under the pot. Two adult skulls, a man and a woman, were intact, and looked as though they had been placed to look up at the sky. (See photo above.) Were these the remains of a family?

The excavation, though exciting,

was by no means the only activity of the winter. Throughout the December-January season, Elizabeth performed the vital if unglamorous work of database management and data-entry supervision. At the end of December, Stephanie Howden, a professional archaeologist from Australia with survey and GIS experience, arrived to volunteer her efforts for MMAP. We were very lucky to have someone of her experience and enthusiasm, and she quickly became one of the leaders in the survey

of the Philippines, to, as he put it, “make pretty maps and do spatial analysis.” The last visiting scholar was Gillian Thompson of the University of Bradford in England, who came to train the team in flotation and seed analysis. Flotation is the process of rinsing samples of dirt from excavated contexts to capture the fine seeds, shells, and tiny bones that are too small to be caught in the regular screen. Study of the residue can reveal vital details of what people ate and wore in the past. Gill and the Lao team floated 28 samples from Tham An Mah, for a total of 44 samples from MMAP excavations of four sites. We look forward to learning the results of her research.

In a new endeavor for MMAP, two experts in palaeoclimatology, one from the University of California at Irvine (Kathleen Johnson) and one from the University of Newcastle, Australia (Michael Griffiths) conducted speleothem research in

the deep caves around Luang Prabang. ‘Speleothem’ is the technical name for what we non-geologists call stalagmites, stalactites and other drippy limestone rock formations. Armed with head lamps, cave suits, and hard hats, they explored far into caves with long meandering galleries. When they found speleothems suitable for analysis, they sometimes removed the entire speleothem,

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**Above:** Elizabeth Hamilton and a group of Lao school girls look on as Souliya Bounxaythip carefully excavates a pot with the remains of three people inside.



**Left:** Skulls found in the pot.

project. This year, the survey team concentrated on the area around Tham An Mah, attempting to fine-tune our knowledge of settlement patterns around the site. Although MMAP only had four weeks to conduct survey this season, 15 new sites were recorded. *Thank you, Stephanie, Phou, Noupanh, and all the other survey team members!* Arriving later was Emil Robles, a GIS specialist and graduate student at the University



**Left:** Volunteer Bill Henderson shows MMAP co-director Bounheuang Bouasisengpaseuth the video camera he used to film the 2005 field season. **Right:** Barbara and Bill Henderson enter data during MMAP 2005.

## Bill Henderson

### *Volunteer of the Year*

*by Members of the  
Ban Chiang Gang*

*Bill's history with the Ban Chiang Project (and later MMAP) began in 1992. In his former life, Bill was a partner in a graphic arts company that designed and produced flexographic printing plates for the shipping container industry. During most of his time here with Ban Chiang he was occupied with the compilation of pottery rim data from the Sakon Nakhon Basin, the area of the Ban Chiang excavations in northeast Thailand. He went to Laos twice; the first time was in 2005 with the original MMAP survey team. During that visit, Bill made the video, "A taste of Luang Prabang." He returned for a second year in 2008. Sadly, Bill passed away on January 10, 2010. On April 26th, Bill Henderson was honored as "Volunteer of the Year" at the annual Penn Museum's Volunteer Luncheon. The following are some of our fond memories of Bill...*

**Joyce White** Bill Henderson appeared with a crop of volunteers that responded to an ad for jigsaw puzzle devotees to come help put Ban Chiang pots together during the summer of 1992. Within days he said to please

give him another long term project, jigsaw puzzles were not his thing.

Archaeologists always have projects in the back of their minds that they wish someone would come along and spend years doing. The archaeology of Thailand needed someone to spend years compiling a rim sherd typology, a really basic task that in some other part of the world, like the American Southwest, was done 100 years ago.

Not knowing what he was getting into, Bill agreed to tackle the job. In 2009 he was close to finished. The job took him in many directions, including giving papers at 2 international conferences in Asia and a publication. In addition, he came to two MMAP seasons in Laos, videotaped both, and was always available for everything from advising me how to respond to the latest jab from a scholarly foe to stuffing envelopes.

Bill was the perfect volunteer, tireless, patient, creative, determined, fun, committed. He could spend weeks and months solving a problem on his own, whether it required mastering new software or learning to use a video camera. When ready he corralled me for a head to head on where he was with the data and what the next step was. His legacy will go down in the thorough job he did on the rim sherds. His typology will be incorporated into the larger ceramic

analysis program starting in Fall 2010 (see article on page 2). Bill, I trust you will be watching over us as we weave all your hard work into the full data analysis. Thank you.

**Elizabeth Hamilton** I remember Bill mostly from the Brown Bag meetings we used to hold at Tuesday lunch. He was attentive to the conversation, but usually quiet, so like E. F. Hutton, his occasional comments and questions were paid attention to. We knew he had had a successful business career before coming to Ban Chiang, his perspective was refreshingly different and worth listening to. My other memories of him are mostly of him faithfully hunched over the computer, working on pottery rims. I admired his dedication to the Ban Chiang Project and to a rather obscure but necessary topic. He consistently gave us his time, attention, and intelligence. I only hope what we gave him in any way matched what he gave us.

**Ardeth Abrams** No job was too great or too small for Bill. He was always happy to write an interesting article about his travels with MMAP in this newsletter. He wrote four *Ban Chiang UpDATE* articles during his many years with us. Bill was also a great proof-reader; I would give him the newsletter for a once, twice, maybe even a three

times-over of editing. In addition to being the Ban Chiang artist, I am responsible for mailings here at the Project. I really relied on Bill for his help stuffing a mountain of newsletters into a mountain of envelopes. Bill loved gardening and would give advice at our weekly office brown bag lunches! I will really miss that, too. Bill was simply a joy to be around.

**Beth Van Horn** (volunteer) I accompanied Bill and Barbara Henderson on the 2005 MMAP field season to Laos. They were already seasoned travelers from accompanying Joyce on past trips to attend conferences in Malaka and Taiwan. What I remember most vividly was the respect Bill received from the Lao. He astounded our Lao colleagues by climbing a

steep ridge that led to a cave site that was being surveyed. Later at lunch, everyone was sharing various information about themselves and Bill told them he was 76! Afterwards, the Lao insisted on carrying his belongings and camera equipment back down the mountain. Bill was very young at heart.

**Yanik Ruiz-Ramón** (former work-study student) When I was in Laos [in 2008] on an excavation with Bill we would walk down to the river together at the end of the day so that we could attempt to cleanse ourselves from the ever-present dust and humidity that hung in the air. One day we went and found a large gathering of Laotians eating and drinking by the river bank. We had never seen this many people there before. It was

International Women's Day and the village was celebrating. They enthusiastically insisted that we join them. So, dressed in our bathing suits and towels, we joined our hosts. The women fed us grilled meat, the men thought it was more important that we become as drunk as they were. They lined up shots of rice alcohol, similar to sake, and kept on refilling our cups before we had a chance to politely refuse. Bill took the first glass offered, but afterward he funneled all of his alcohol over to me. After working in the heat all day and subsisting on nothing but sticky rice for more than a week, my tolerance level was not quite up to par. Bill no doubt chuckled as I quickly tried to get from the river back to camp before the alcohol really hit me. ❖

—*The Ban Chiang Gang*

## LAB notes

### Conferences

❖ In early December, **Joyce and various other MMAP team members** gave papers at The Indo-Pacific Prehistory Association (IPPA) in Hanoi, Vietnam. Their session was entitled: "The Mekong Basin as a Bio-Cultural Geographic Region in Prehistory."

### Publications

**White, J. C. and Hamilton, E. G.**

2009 "The transmission of early bronze technology to Thailand: new perspectives" *Journal of World Prehistory* 22: 357-397.

**White, J. C., Lewis, H., Bouasisengpaseuth, B., Marwick, B., and Arrell, K.** 2009 "Archaeological investigations in northern Laos: new contributions

to Southeast Asian prehistory" *Antiquity* 83(319). Online at: <http://antiquity.ac.uk/projgall/white/>.

**Marwick, B., White, J. C., and Bouasisengpaseuth, B.**

2009 "The Middle Mekong Archaeology Project and International Collaboration in Luang Prabang, Laos" *SAA Archaeological Record* 9: 25-27.

### Online

❖ To see past newsletters, the most up-to-date news on the Ban Chiang Project and MMAP, read PDFs of scholarly publications, watch videos, and much more, please visit our two **new web sites**, addresses below.

### Other News

❖ **Joyce** gave the talk, "Angkor!", at the lecture series "Great Archaeological Discoveries" at the Penn Museum on November 4th, 2009. There were more than 200

attendees at this event.

❖ On April 28, **Joyce** gave a lunchtime talk at the Museum's Scholars Series: "Prehistoric Research and Heritage Management in Luang Prabang Laos." She reported on her Luce-funded research and heritage management training program in Luang Prabang.

❖ **Joyce** also gave talks for the **National Museum in Vientiane, the Penn Museum guides, Penn Museum Board, and Franklin Inn Club** in Philadelphia.

### In the Lab

❖ In April, the Ban Chiang Project welcomed a new volunteer. **David Smith** has a Bachelor of Science with Archaeology as his field of interest. David will be digitally photographing the small finds and storing them in the Digital Archives.

**Check out our brand-new websites!**

**[penn.museum/ban Chiang](http://penn.museum/ban Chiang)**

**AND [penn.museum/mmap](http://penn.museum/mmap)**



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- ❑ I would like more information about the Ban Chiang Project.
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*If you can't make your contribution in U.S. dollars, please contact us!*  
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 .....

making for interesting times at the airport when they tried to ship them home. Back in the lab at Irvine, they will measure the oxygen isotope ratios of the individual layers in an attempt to reconstruct thousands of years of climate change data. We hope their research will provide new and exciting information about climate patterns during human occupation in this area over the last few thousand years.

MMAP's efforts at public outreach were taken to a new level when Amy Ellsworth, the digital media developer at the Penn Museum, arrived at the beginning of January. Amy's job, assisted by her friend Michael DeWald, was to document the season and record a blog about her reactions to Laos and MMAP's work. We wanted a non-archaeologist and Laos novice to tell the world in general and Penn undergraduates in particular what she thought was notable and interesting about MMAP. She recorded a lot about the excavation, but spent even more time with the speleothem crew as they ranged around the countryside exploring



Kathleen Johnson and Michael Griffiths conduct speleothem research in the deep caves around Luang Prabang.

caves and encountering interesting fauna—like pythons. See her entertaining blog at <http://middlemekong.wordpress.com/>. Great pictures, too!

❖  
*Elizabeth Hamilton,*  
*Research Coordinator*  
*The Ban Chiang*  
*Project/MMAP*



*a New Face* **in the Ban Chiang Lab**



❖ **Elena Nikolova** is a senior in the College of Arts and Sciences and our newest work-study bibliographer. She is majoring in International Relations. Elena spent last Spring semester abroad in Paris, France where she conducted independent research on French-Libyan historical relations at the Sciences Po Library. The Southeast Asian Bibliography is accessible at <http://seasia.museum.upenn.edu/>.

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