



# The Ban Chiang UpDATE

Newsletter for the  
Friends of Ban Chiang

Preserving a UNESCO World Heritage Site Issue #5 Spring/Summer 1997

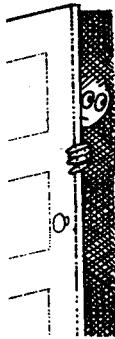
## From the ~~Director~~... Artist, again

While Joyce is still in hibernation writing and editing Volumes I and II of the Ban Chiang monograph series, she has again asked me to write the opening statement for the newsletter.

I include in this extended issue of *UpDATE* a milestone – our first "letter to the editor!" Alex Ovenden, proprietor of the Lakeside Sunrise Guesthouse in Ban Chiang village, has written in response to Stephen Young's article, "Ban Chiang: *Thirty Years Later*." Alex, a permanent resident, has a somewhat different perspective on modern day Ban Chiang.

Also in this issue, Vince Pigott reminisces about how he found his way to Southeast Asian archaeology.

Joyce is enclosing with this newsletter an article that you, FOBCers, have made possible. Your support has made the difference for the AMS dating program and the Thailand Palaeoenvironment Project. Recently, your support has gone towards thin section analysis of pottery. We thank you all for your critically important support. ❖ -A.A.



## From "Near East" to "South East" or How I Ended Up Digging in Thailand

by Vincent C. Pigott

If anyone had said to me during the course of my graduate studies in the Dept. of Anthropology at the University of Pennsylvania that I would, at some point in my scholarly career, direct excavations in Thailand, I simply would not have believed them. Southeast Asia was probably about as far from my research interests at that time as any subject could get, not to mention the fact that until Chet Gorman arrived at Penn in 1973, neither studying the region nor participating in excavations there was part of the Penn program. Dr. George Dales and then graduate student Bennet Bronson had had a brief foray into Thai archaeology with their excavations at Chansen in

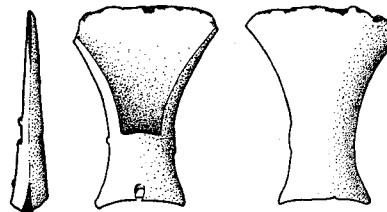
1968 & 1969, but this did not lead to an on-going research initiative based at the Museum.

I got to know Chet Gorman almost from the moment of his

arrival in Philadelphia because he moved into a tiny ground floor apartment in the building where I and a number of other Penn grad students in archaeology from the Anthropology and Oriental Studies Departments lived. The building, the Arvilla, better known around the Museum as 'Archaeology Arms,' became the stuff of legend or should I say Apocrypha over the years as a number of students and visiting scholars occupied, shared and in various combina-

tions lived with each other as they came from and went to excavations around the world. This was an important period when field-work opportunities were in their heyday for students at Penn thanks to

a major Ford Foundation grant which was designed to put students on digs. So from that point onward either at the Arvilla, where Chet 'held court'

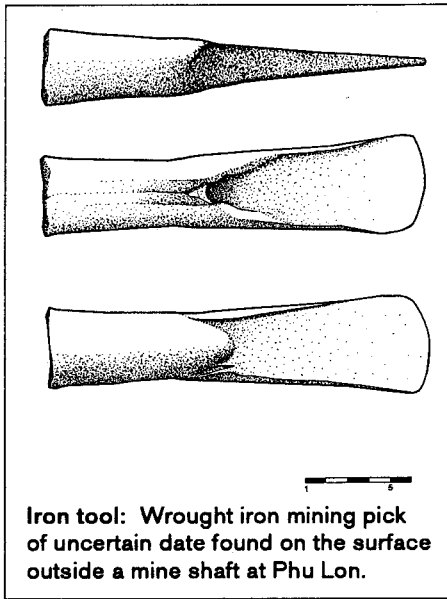


Bronze socketed adze: Excavated near the village of Ban Noi at Phu Lon.



*continued on next page*

and cooked great Thai food, or around the Anthropology Department, there were frequent opportunities to talk to Chet about his work in Thailand. In addition, with the influx of a number of Thai students (Ford Trainees) to the Department who studied with Chet up until his death in 1981, the discussion groups amplified. A frequent subject of such discussions was the origins of bronze-



Iron tool: Wrought iron mining pick of uncertain date found on the surface outside a mine shaft at Phu Lon.

working in Southeast Asia, a subject fraught with controversy arising out of the Ban Chiang Project which had aroused international interest in this important technological change. Gorman and Pisit Charoenwongsa, his Ban Chiang co-director, and I often spoke of the issue of location of ore sources, especially tin, essential for alloying with copper to make bronze.

While these issues were of great interest to me, my research interests lay in resolving archaeometallurgical problems in a distant heartland of ancient metallurgy, namely the Iranian Plateau. As a student of Robert H. Dyson, Curator of the Near East Section and Director of the Hasanlu Project in northwestern Iran where I spent three seasons of excavations, I was completing a dissertation focused on the origins of iron metallurgy in western Iran. Thailand sounded fascinating,

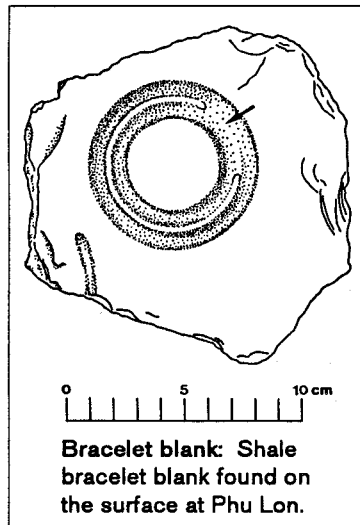
but I had committed to the ancient Near East and Iran in particular. However, two events were to take place which were critical in helping to turn my research interests eastward. In 1976, I spent the month of October digging at Tepe

Hissar in Iran and took on the responsibility of studying the vast amount of production debris from a major Bronze Age metal industry (arsenical copper it so happens). This peaked in me a strong interest in copper metallurgy. Then in 1977-78 the winds of change swept through Iran bringing the revolution and an end to the post-war period of American archaeology in Iran and to the possibility of further fieldwork in that country.

In 1978, after returning to Penn following a teaching stint at Berkeley filling in for George Dales, I was hired to work at MASCA and conduct research in archaeometallurgy of copper, its alloys and iron. I spent those years prior to Gorman's death in 1981 involved mostly in lab research developing an understanding of metallography, the study of the micro structure of ancient metal artifacts. Much of my understanding of micro structure had come through working with Prof. Robert Maddin, the Penn metallurgist who, with Dr. Tamara Stech, had

conducted the initial investigations of Ban Chiang bronze (see *Expedition*, 1976). A year later, in 1982 I taught with Maddin Anthro. 576, a course in archaeo-metallurgy, and two young Southeast Asian Ford Trainees, Surapol Natapintu from Thailand and Timbul Haryono from Indonesia, took the course. Their research evolved into their M.S. theses in the Dept. of Anthropology and was focused on bronze metallurgy and the analysis of bronze artifacts from Ban Chiang. Even at that time I still had no inkling that in the winter of 1983 I would be in Thailand.

Late in 1982 a group of iron artifacts from the site survey conducted at sites in the area around Ban Chiang by Penn graduate student Bill Schauffler were offered to me for analysis. At about the same time as I initiated this research project, the first metallographic study of prehistoric iron from Southeast



Bracelet blank: Shale bracelet blank found on the surface at Phu Lon.

Asia, Pisit Charoenwongsa visited the Museum and inquired of Director Robert Dyson if Penn was interested in returning to Thailand to continue the fieldwork and research which had been pioneered by Chet Gorman. The Director asked me, probably the only archaeologist on staff who had not gone digging in some years, if

I was interested in pursuing this unique opportunity. I quickly agreed on the condition that I could initiate a field survey designed to explore archaeometallurgical issues rather than a full blown settlement survey in a

region which I knew very little about. Things evolved rapidly, and Joyce White, who had recently taken charge of the Ban Chiang Project, suggested that I present a paper on the Ban Chiang site survey iron analysis at the 15th Pacific Science Congress to be held in 1983 at the University of Otago in Dunedin, New Zealand. Following the presentation we were to go on to Bangkok and then up country to northeast Thailand to check out the lay of the land as well as the archaeometallurgical potential of the region. The die was cast.

On tour in the northeast we were joined by Surapol Natapintu. We traveled first to Khon Kaen and then Udon visiting the headquarters of NETAP, the Northeast Thailand Archaeological Project, the local arm of the Thai Fine

Arts until we headed west and then north to the city of Loei, the capital of one Thailand's provinces richest in minerals. Here we met a remarkable man, Udom Theetiparivatra, a geologist working for the Department of Mineral Resources who for the previous 20 years had walked the hills of Loei province documenting the location of ore deposits of copper, lead, zinc and iron as well as noting the locations of archaeological mate-

rials in association with these deposits. Without Udom our future work in Loei would not have been possible. He guided us along the Mekong Highway to a point in extreme northeast Thailand not far from Vientiane, Laos. Here up slope from the village of Ban Noi was a curiously configured hill known as Phu Lon or 'bald mountain'. Upon setting foot on this site it was clear to me that this was an ancient copper mine, an unusually important

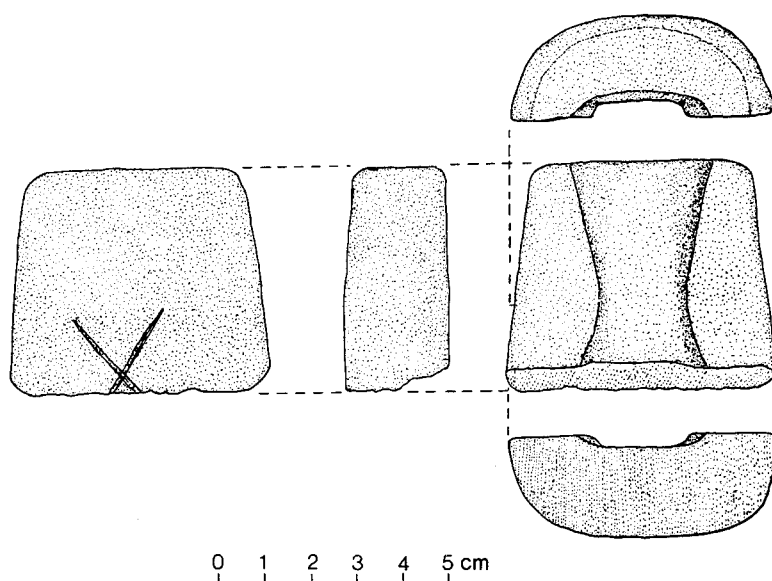
down the hills of Loei sampling the ore bodies and archaeological/industrial sites of the region. Then in 1985 with funding from the National Geographic Society, Surapol and I co-directed excavations at Phu Lon, the first and thus far only mining site to be excavated in Southeast Asia.

I will close with one last recollection, in January of 1985, as we headed north from Bangkok to excavate Phu Lon, Surapol suggested we stop near the central

Thai town of Lopburi to visit what he said were enormous archaeometallurgical sites which he had recently surveyed for the Fine Arts Dept. Once again as we set foot on site I knew we were experiencing something unique and that we would be back. The prehistoric site of Non Pa Wai, some 50,000 square meters of copper smelting debris and the detritus of habitation, has few rivals elsewhere in

the world. In 1986 TAP moved south from Loei and began a decade of research in the Khao Wong Prachan Valley into Thailand's remarkable technological and cultural antiquity. Stay tuned, there is more to come. ❖

Dr. Vincent C. Pigott  
Research Archaeologist  
Museum Applied Science  
Center for Archaeology  
(MASCA)



Mold fragment: Ceramic mold fragment for a socketed tool excavated on the Pottery Flat at Phu Lon. Note the incised 'X' on the exterior which could be a maker's mark.

find for my attempts to begin to understand the nature and origins of prehistoric metallurgy in this region. As a result of a very successful survey season, in the months following, a contract was signed and, TAP (the Thailand Archaeometallurgy Project) was born - a collaborative project between the Fine Arts Dept. and the Museum. In the next year, 1984, supported by the Museum, Surapol, Udom and I spent 6 weeks walking our feet off up and

# Modern Ban Chiang: Another Perspective

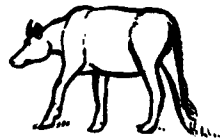
*by Alex Ovenden*

It was good to read Stephen Young's account of his visit here in mid June 1996 for the light and sound spectacular celebrating the King's golden jubilee (fifty years on the throne). But I feel he may have unintentionally led some readers to imagine that Ban Chiang has changed so radically since 30 years ago that it is practically a different town. Please allow me to assure you all that while change is inevitable, Ban Chiang is still relatively peaceful and quiet, with modernization restricted for most people to television, motor-bikes and cars, usually purchased with money earned overseas. And increasingly, people are buying washing machines and video cassette players. And some, like us, have finally had landline telephones connected, after waiting for years.

But only the wealthiest can afford cellular phones. And I am yet to see a satellite dish, although there may be a few tucked away behind the houses of the rich. Traffic congestion I have seen only once in my three years

here - during that weekend in June last year when we were flooded with visitors!

Many of the older style houses with wooden pillars certainly have been demolished by now but they are nearly always rebuilt, with taller termite - proof concrete pillars. Timber is much preferred for the upstairs level. Single level brick and concrete bungalows are definitely uncommon. Visitors can still admire many houses in the older style because many families are still so poor they could not



Young boy herding a water buffalo in the village of Ban Chiang.

afford to rebuild even if they wanted.

Abandoned rice fields? In June, just after the start of the rainy season, some fields are prepared and planted. Others are not and so may appear abandoned. But, with large families and many mouths to feed, from grandparents downwards farming is still necessary and it would be rare for good land to be left fallow.

Ploughing activity in June may help to account for Stephen seeing no young boys herding buffalos. At that time of the year they - the buffalos and many of their owners - stay for months at a time in the paddy fields. But they - the buffalos - are still very popular here. My partner, Tong, estimates that 70-90%, no statistician she, of farmers prefer buffalos because they provide free organic fertilizer and the motorised ploughs are suspected to cause kidney damage because they jolt the driver so much!

Certainly many people leave to work elsewhere in Thailand or overseas - in order to get money in the bank for retirement, material goods or a good education for the children. But they nearly always want to come back.

I hope that FOBCers understand that Ban Chiang is still a friendly, sleepy and relaxing

place - not a miniature version of Bangkok. Quite a few people have stayed here more than one or two days, and no, they were not archaeologists, so it must have some charm of its own.

We look forward to meeting any FOBCers who might visit Ban Chiang in the future.

Thanks and best wishes. ❖

Alex and Tong Ovenden, Proprietors  
Lakeside Sunrise Guesthouse

## LABnotes

❖ **SAVE THE DATE:** October 24, 1997, the Museum and the Royal Thai Embassy plan to have an event celebrating Ban Chiang. All FOBC will be invited.

❖ Volunteer, John Hastings has converted the Ban Chiang office computer network from DOS to Windows '95. *Hello 21st century!!*

❖ As a byproduct of John's conversion of the Lab computers to Windows '95, volunteer, Bill Henderson is now mastering Microsoft Office. He is converting his rim data into an Access data file. Bill is busy computerizing his nearly 1000 rim images!

❖ Volunteer, Ruth Brown is also upgrading our computerized bibliography. She is cleaning up the old bibliography data base and mastering the new Windows Citation data base. Ruth is pleased to be using a mouse (Windows '95) rather than memorizing keystrokes (DOS).

❖ Visitors to the Ban Chiang Lab will notice the first room in the Ban Chiang suite has had a much needed face lift - a new coat of white paint, as well as repairs to water damage to the

wall, and a new air conditioner. A wonderful improvement!

❖ Dr. Rasmi Shoocongdej of Silpakorn University in Bangkok, recently visited the labs. We are exploring ways to increase and improve our binational collaboration.

❖ Dr. Brian Vincent in New Zealand has begun having the thin sections of Ban Chiang pottery prepared, supported by FOBC contributions. His latest e-mail indicates his excitement about the information on ceramic technology that will come from his research.

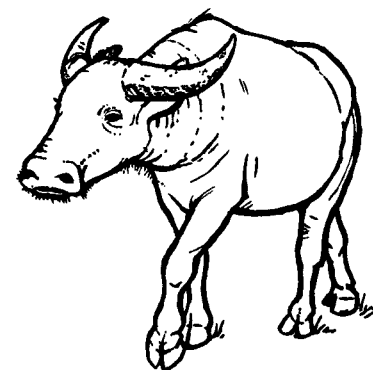
### Recent Publications:

Joyce C. White

1997 "A Brief Note on New Dates for the Ban Chiang Cultural Tradition." Bulletin of the Indo-Pacific Prehistory Association, volume 16, pages 103-106. *This article is enclosed in this issue of UpDATE.*

Lisa Kealhofer

1996 "The Human Environment During the Terminal Pleistocene and Holocene in Northeastern Thailand: Phytolith Evidence from Lake Kumphawapi." Asian Perspectives, volume 35, pages 229-254.



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of Archaeology and Anthropology  
33rd and Spruce Streets  
Philadelphia, PA 19104-6324

## Don't Forget – Renew Your Support of the Friends!

If you haven't renewed your support to the Friends of Ban Chiang during the past year, please do so with this newsletter. As you read the enclosed article on the new dates for the Ban Chiang Cultural Tradition, know that your contribution enabled that expensive research to happen. The work is far from over with the ceramics analysis as our next priority, so please renew today to ensure your future with the Friends.

If you have made a donation within the past year, thank you! -A.A.

### Become a Friend of Ban Chiang!

Enclosed is my contribution of \$\_\_\_\_\_ payable to the  
**TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA.**

I would like to renew my contribution of \$\_\_\_\_\_ to support the Ban Chiang Project.

I would like more information about the Ban Chiang Project.

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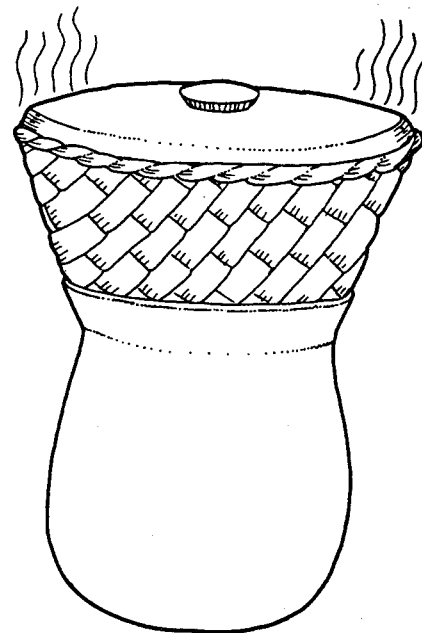


## *Fool Proof Recipes from Joyce's Kitchen:*

### Sticky Rice\*

*(also known as sweet rice or khao niew)*

- 1. Preparation.** You will need the proper steaming pot and steaming basket (see illustration) as well as the proper rice (khao niew). All three items can be purchased at P. P. Grocery in West Phila.
- 2. Soaking the rice.** In a big pot, rinse 1-3 cups of rice in a couple of changes of water, then soak the rice filling the pot with water at least one inch above the level of the rice. Rice should soak at least 6-8 hours.
- 3. Steaming the rice.** Drain water from rice one hour before serving time. Fill aluminum steaming pot slightly less than 1/2 full. Put rice in the steaming basket set onto the mouth of the pot (base of basket should be just above the water level in pot). Place a cover from an appropriately sized pot over the rice, but in the basket. Put burner on full heat and after water has come to a boil, steam on full for 45 minutes. (Since the rice is cooked by steaming, heat must be at the maximum to produce the volume of steam necessary to cook the rice).
- 4. Serving.** Turn out the rice on a surface, such as a moistened board or cookie sheet and fluff with wooden paddle or spoon. Turn into serving baskets.
- 5. Eating.** Grab walnut-sized hunks of rice with your fingers, squeeze into a tight ball and dip into sauces such as the one that follows. . .



### Chile and Coriander Sauce *(spicy!!!!!!)*



Using a heavy stone mortar and pestle or a very small food processor, mash or grind eight tiny, fresh, hot peppers\* (one for each person), with five cloves minced garlic. Add one teaspoon sugar, four tablespoons fish sauce\*, and the juice of one thick slice of lime. When the sauce is blended, stir in one tablespoon minced fresh coriander (cilantro).

Ingredients with a \* can be purchased at P. P. Grocery, 4300 block of Locust Street in West Philadelphia.