Q’eqchi’ (K’ekchi’) “Palm-thatched Houses”

Alta Verapaz and Izabal, Guatemala

Text and photographs by Nicholas Hellmuth
The architecture of the Maya is something I have been interested in since my first trip to Chiapas (at age 16). By 17 or 18 I was already at Bonampak and by 19 had been in Copan Ruinas, Honduras. Today (since 2013) the museum of Copan Ruinas features my photographs together with their exhibits (photographs taken within the recent decade).

Coming from a family of architects (father, grandfather, great uncle, and two brothers), I was gently encouraged to study architecture. So as a dutiful son I enrolled in architectural sciences, the name of the architectural major at Harvard in the 1960's. But then I was offered a position at the Tikal archaeological project of the University Museum, University of Pennsylvania, and during 12 months field work at Tikal became more deeply interested in the architecture of the Maya. By that age, 19, I had already visited the major Puuc ruins of Mexico, Palenque and Bonampak, and Copan, and had been at Tikal already twice. So when I returned to Harvard I switched my major to art and architectural history.
Although I am interested in temple pyramid architecture, palaces, roof combs, and especially in ball court architecture (for the rubber ball games), I am also interested in thatch-roofed buildings: both temples and domestic structures (houses for example).

In the 1970’s I have studied wattle-and-daub, but this form of construction is found a tad more in El Peten and not often in Alta Verapaz.

Since tin roofs are increasingly popular, it will be only a few more years before scholars will not be able to see many thatch roofs under construction in the Lowland Maya regions of Guatemala. Already 90% of the walls of new houses are made of horizontal wooden planks instead of traditional Q’eqchi’ Mayan materials (poles or potentially wattle-and-daub). And of course more and more houses are made of ugly concrete block, so year by year there are fewer examples of Mayan houses to study.

Thus I felt it useful to take snapshots of roof construction when driving through Alta Verapaz. Unfortunately the camera had a glitch this day, so white areas “glow” incorrectly.
Junco
Carludovica palmata, k’ola

Q’eqchi’ (K’ekchi’)
"Palm-thatched Houses"

Palm-thatched Houses
Houses

Palm-thatched
Houses

Palm-thatched
Houses

Cricchio

Cricchio

Cricchio
Here is the actual junco palm-like tree, Carludovica palmata, directly across the Rio Icbolay from the town where some house roofs were with junco. Ilena Garcia, in-house botanist at FLAAR, indicates that this tree is also locally known in Guatemala as Calá. She and her family are from Coban, Alta Verapaz, so she knows a lot of the local terms.

Most of the house roofs we study are Q’eqchi’ houses that we see as we are driving down dirt roads throughout Alta Verapaz, Guatemala.

Many species of palms used for thatch besides just guano and corozo palm

After seeing local Mayan houses along the dirt roads through the mountains and jungles of Alta Verapaz for several years, I gradually began to learn that there were other thatching materials besides guano palm or corozo palm. Guano is used mostly in El Peten and Yucatan Peninsula; only rarely do you find a roof of guano palm in Alta Verapaz. Ethnobotanist Dr. Javier Caballero, UNAM, has written extensively on guano palm in Yucatan. It would be helpful if research this well documented could be done for each of the alternative thatching plants in Guatemala, Honduras, and Belize.

I hope that the photos we are publishing will raise interest among students to do a good thesis or dissertation on the other thatching plants.
Chisec, Alta Verapaz, June 2014

Palm-thatched Houses

Corozo
Acrocomia aculeata

Q’eqchi’
(K’ekchi’)

“Palm-thatched” Houses
Acrocomia aculeata, Corozo

thatched roof

Junco, calá

Acrocomia aculeata, Corozo

Acrocomia aculeata, Corozo

Acrocomia aculeata, Corozo

Acrocomia aculeata, Corozo

Acrocomia aculeata, Corozo

Acrocomia aculeata, Corozo

Acrocomia aculeata, Corozo

Junco, calá
Corozo
Acrocomia aculeata
La Ceiba, Peten, march 2014

Corozo
Acrocomia aculeata
Palm-thatched Houses

La Tinta, Alta Verapaz, March 2014
Other kinds of plants are actually used for thatch besides just palm fronts (grass for example).

Over the years we have made friends with local Q’eqchi’ Mayan people in various aldeas, communities, and villages. Don Chus (about 30 minutes from La Chua research and park, north-western Alta Verapaz) was able to identify the grass-like plant that I had noticed being used as thatch. He even took us out to a field where we could see the actual grass-like plant (this field belonged to him and associates; we prefer to do our photography on property owned by people we know and who know us).

The photographs in this PDF were gathered to send to Dr Hasso Hohmann, who is knowledgeable about Maya architecture in general, and especially the architecture of Copan.
Panicum sp, Lancentillo
This house near La Tinta we need to return to it and ask the owner what palm tree he used for thatch.
Introductory Bibliography on Maya House Architecture Including books on palm trees for thatch roofs

The following bibliography is on palm trees of the Maya area in general and a bit on palm thatched roofs. This is an introductory bibliography, meaning that it is intended to get you started. If you need a bibliography for a dissertation you can find that by spending several weeks in a major library and Googling pertinent keywords. We will have separate bibliographies on the grass(es) used as thatch as time allows (sadly we have no funding for a formal project, so we do our best to do the bibliographic research at night and on weekends (and when I am in airports around the world as I fly to lecture or attend digital technology expos).

ABRAMS, Elliot

BALICK, M. J. (Ed.),

BALICK, M. J. and H. S. BECK

CABALLERO, Javier

CABALLERO, Javier
1994 Use and Management of Sabal Palms among the Maya of Yucatan. Ph.D., University of California, Berkeley, USA, 186 pages.

CABALLERO Nieto, Javier
2000 Sostenibilidad del uso y manejo tradicional de la palma de guano (Sabal spp, Arecaceae) en el área maya de Yucatán, Universidad Nacional Autónoma de México. Instituto de Biología. Informe final SNIB-CONABIO proyecto No. M111. México D.F.

CABALLERO, Javier, PULIDO, María Teresa and Andrea MARTINEZ-Ballesté
2004 El uso de la palma de guano (Sabal spp.) en la industria turística de Quintana Roo, México. Capitulo 19, pp. 359-379. Available on-line: www.uv.mx/ethnobotany/caballero_files/Caballero%20etal2004%20CIFOR.pdf Another source says pages 365-386 but perhaps that is another edition. Here is that listing:

DIETZ, Albert, KOTH, Marcia and Juli, SILVA

GAMA, V.

HODEL, D. R.

LUNDELL, Cyrus L.

LUNDELL, Cyrus L.
MARTINEZ-Balleste, Andrea
2006 Dinámica Poblacional y Sostenibilidad de las Formas Tradicionales de Manejo de la Palma de Guano (Sabal spp. Arecaceae) en el Área Maya de la Península de Yucatán. Ph.D., Universidad Nacional Autónoma de México, México D.F., 94 pages.

MARTINEZ-Ballesté, Andrea, Martorell, Carlos and J. CABALLERO Nieto

They list, among others, xa’an palm (Sabal yapa and Sabal mexicana)

MOYA Rubio, Victor Jose
1988 La vivienda indígena de México y el mundo. UNAM. México.

PULIDO Silva, Maria Teresa and J. CABALLERO Nieto
2008 La palma de guano en la Península de Yucatán. Uso y manejo de recursos naturales. 157-160 pages.

QUERO, H.
1992 Las Palmas Silvestres de la Península de Yucatán. Instituto de Biología, Universidad Nacional Autónoma de México, México, 63 pages.

REDFIELD, Robert and Alfonso VILLA Rojas

SEMARNAT
Plan de manejo tipo para palma chit (Thrinax radiata). SEMARNAT
www.semarnat.gob.mx/archivosanteriores/temas/gestionambiental/vidasilvestre/Documents/Planes%20de%20Manejo/PMT-Thrinax%20radiata%2011%20enero%202013.pdf

THOMPSON, J. Eric S.

Plate X, page 91, shows a complete diagram of the pole structure of a Maya house. But there is no information on the names of the different parts of this house. Nonetheless, it is a good drawing.

Plate IX shows photographs of two sides of a finished house.

Plate I shows two photographs from a high point looking down on the whole village, showing about 20+ thatch roofed houses. Very remarkable view, probably unique for showing so many.

WILSON, Michael Robert
1972 A Highland Maya People and their Habitat: The Natural History, Demography and Economy of the K'ekchi'. PhD dissertation. Department of Geography and the Graduate School of the University of Oregon.

ZONA, S.

A few sample web sites with snapshots of Maya houses

www.csms.ca/hut.htm
6 nice snapshots of Maya houses: Peten and Yucatan, but all palm-thatched; no grass.

www.csms.ca/index.htm is The Canadian Society for Mesoamerican Studies
contact is Dr H. Stanley Loten, Secretary and Treasurer: sloten@sympatico.ca, Dr Louise I. Paradis: President; Dr James C. Langley: Vice President

www.csupomona.edu/~lugo/MAYA/index-2.html
A nice drawing of a structure of a Maya house, inside and outside, with Yucatan Maya words for each part.

First posted June 4, 2014.
We appreciate the hospitality of botanists at UNAM campus outside Mexico City.

We were attending a major international digital printing exposition in the city center during August 2014, but each morning we went to visit appropriate Maya-related research centers: one morning to Museo Nacional de Antropologia, and one morning to UNAM; and one morning in the Centro Historico to find as many books on Mesoamerica flora, fauna, and archaeology as it was realistic to fly back to our research center.

At UNAM we met first with Dr. Gerardo Adolfo Salazar Chavez, who introduced us to Dr. David S. Gernandt. They in turn kindly took us to another building to introduce us to Dr. Javier Caballero.

Dr. Robert Bye was away doing field research so it was not possible to visit with him.

It is appreciated that the biologists here at UNAM allowed us to visit, unannounced (since we never knew how long it would take to get to the campus or find their building on what is probably the largest university campus in the world).
Palm-thatched Houses

K’ekchi’

Q’eqchi”

“Palm-thatched Houses”