

FLAAR Reports

January 2008

Photographing fruit trees with medium format digital cameras



Cacao



Introduction

FLAAR is a non-profit research institute dedicated to the study of the anthropology of Latin America. FLAAR specializes in the utilization of digital imaging technology to aid in the study of pre-Columbian cultures and civilizations of Mesoamerica: Guatemala, Mexico, Belize, Honduras, El Salvador, and Costa Rica.

Within the rubric of anthropology, we work primarily in sub-disciplines of

- Iconography: the study of the meaning of art on ceramics, murals, sculptures, etc
- Photography of hieroglyphic inscriptions for epigraphers
- Ethnohistory: studying ethnography through historical records
- Maya ethnobotany: the sacred and utilitarian plants of this region
- Ethnozoology: the sacred and utilitarian animals, fish, reptiles, etc of this region
- Minerals of use to the pre-Columbian peoples
- Architectural history: Maya temples, ballcourts, palaces; Spanish colonial, etc.

FLAAR focuses on development and implementation of digital technology in order to gather a higher quality of professional level photographic record of the aspects of anthropology on which we are focused. There are hundreds of capable, competent, and professional archaeologists, many equally good botanists, zoologists, and other scholars. But unfortunately, advanced digital photography is not taught at most universities. And the equipment is often too costly or complex to transport. Besides, the scholars have a full time job gathering material and taking notes.

So FLAAR fills a notable void: our photographs are legendary among archaeologists for their detail, quality, and for the amount of time and energy that we expend to bring back the best photographic records that is realistic under the conditions of budget and access to the subjects (weather, etc).

This photo essay on cacao is part of a long-range project, that is rather obviously dedicated to cacao. Cacao pods are part of the logo of FLAAR Mesoamerica, the Guatemalan branch of our non-profit institute; in the USA we are simply “FLAAR” or increasingly known as “FLAAR Reports”. Cacao was a sacred plant for the Maya and is mentioned frequently in the historical myths of the Popol Vuh. Cacao beans were the primary currency of the Aztec empire and cacao was probably one of several reasons why Teotihuacan took economic control of the Tiquisate and adjacent areas of coastal and piedmont Guatemala (interest in obsidian trade in the Highlands was another reason for Teotihuacan presence in Guatemala in the 3rd through 5th centuries, with influence at many Peten sites lingering well into the Late Classic).

Photographs of cacao from the FLAAR Archive are in the monographs both of Sophie and Michael Coe, and of Yoshiho Yasugi of the Japanese National Museum of Ethnology (Minpaku, Senri Expo Park, outside Osaka), CHOCOLATE MUSEUM BOOK, The stories of Chocolate History. So our background in professional photography of cacao goes back several decades. The photographs for these books was in the cacao growing area of Tabasco, Mexico. Nowadays we do most of our photography of cacao in Guatemala.

Two difference versions of this report are available

There are two versions of this FLAAR Report on the photography of cacao in tropical Central America.

- The present version is a photo-essay format, and is a free download.
- There is a comprehensive version with text that describes the process of the photography, the specific equipment, and explains how you yourself can do similar photography in your own garden or while out on vacation. We ask a modest donation for the longer version so that we can cover the expenses of maintaining this digital-photography.org web site and so we can contribute to the costs of these Maya ethnobotany photography field trips.

The reason for the free version is so that all our readers can see what we are studying. If they wish more details, such as a step-by-step Learning Unit on how this photography is accomplished, that’s why we have the separate Learning Unit in exchange for a modest donation.





















Acknowledgements for the Digital Photography Equipment

The camera used is a 22-megapixel Phase One P25+ provided courtesy of Phase One and Global Imaging Inc. We at FLAAR especially like the Capture One software, as well as the ease of use of the Phase One capture system. With so many species of plants and animals disappearing, we feel it is crucial to record the flora and fauna of tropical Central America with a camera of fully professional quality. With photographs taken with a medium format camera it is possible to provide a top quality image to botanists, anthropologists who are studying Maya ethnobotany, iconographers, epigraphers and archaeologists who are studying the role of cacao in pre-Columbian Mesoamerica.

20 years ago I fell under the thrall of the Leica myth that 35mm was the ultimate of professional cameras because it had Leitz optics from Germany.

But a few years later I obtained a medium format camera, and learned the truth the hard way: medium format cameras, lenses, and films simply took better photographs.

It's the same in the digital era: a medium format capture simply provides the botanist and anthropologist a higher quality image.

The tripod(s) used are primarily from Gitzo with tripod heads from Arca-Swiss. We also use tripod heads from Gitzo (for large format digital cameras such as BetterLight) and Manfrotto ("action grip" and others, primarily for Nikon and Canon). I sincerely thank Bogen Imaging for providing the Manfrotto and Gitzo tripods and heads for evaluation.

The photographs of the set-up of the Phase One P25+ are taken with a Nikon D200 and a Canon EOS 5D. This month we are upgrading to a Nikon D300. We use 35mm cameras to take photographs of the medium format cameras at work. Plus 35mm cameras are helpful to take details of tiny subjects such as cacao flowers, which are so small that several entire flowers fit into a single 35mm frame. So there is no need to use medium format size on a flower this small.

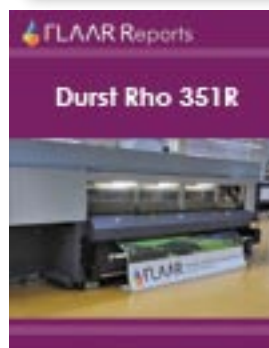
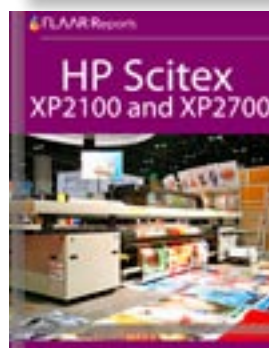
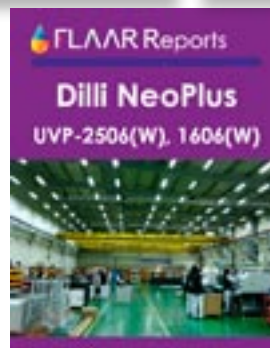
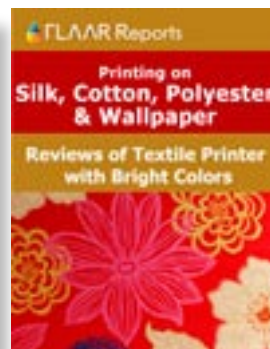
In other words, each format: 35mm, medium format, and also large format digital, has its place. We use the BetterLight scanning camera on a 4x5 Cambo Ultima to do landscape photographs as well as panoramic views. Because this particular trip had no specific budget (no sponsor or benefactor) we did not have a budget to spend the extra days to do panoramic photography of the cacao growing area. But we definitely hope to photograph the overall ecology on a future field trip.

If you would like to join us on a future field trip, and learn first-hand how to improve your digital photography, and are able to contribute to the costs of the trip, please let us know at ReaderService@FLAAR.org. Please realize these are not budget trips, but actual expeditions. Cost includes the expense of yourself, plus a contribution for the overall field trip expenses.

Free Samples Publications

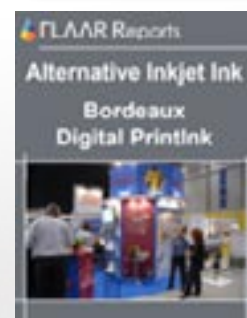
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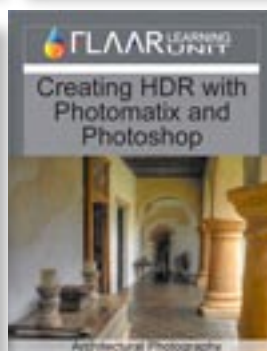
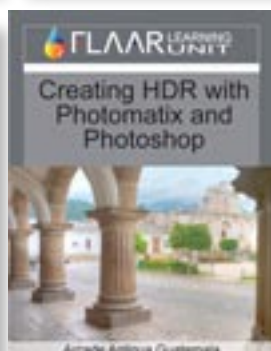
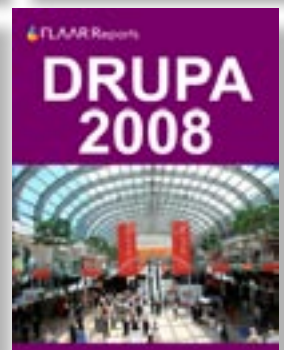
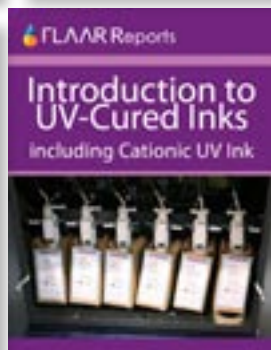
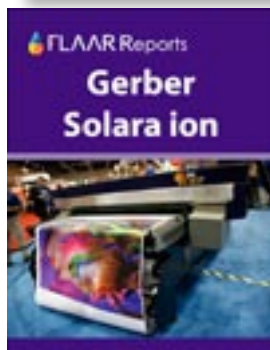
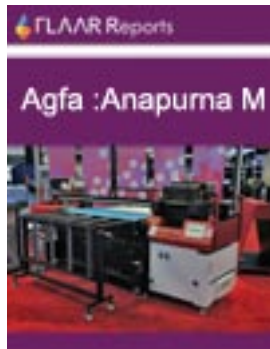
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