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May SWFAS: A History of Dining in South Florida

FPAN Archaeologist Michele Williams, Ph.D., will be the speaker at the May 20 SWFAS meeting which will begin at the regular time: 7 p.m. for socializing and 7:30 p.m. for the meeting.

In "Weeds and Seeds: A History of Dining in South Florida," Dr. Williams examines various plants utilized by early Floridians as well as some of the 'meatier' issues of early diet in South Florida. Learn how the wealth of natural resources in southern Florida has made it a unique dining experience for over 10,000 years.

Michele Williams, Ph.D., RPA is the Director and Terrestrial Archaeologist for the Southeastern Region of Florida Public Archaeology Network. Dr. Williams has participated in digs throughout the southeastern United States for the past 20 years. Her specialty within archaeology is the use of plants by prehistoric Native Americans.

Adventures in Northwest Florida Jungle Archaeology

Review of Dr. Nancy White's March "Trail" Presentation

By Alison Elgart

On Saturday, March 21, Dr. Nancy White, Professor of Anthropology at the University of South Florida, presented a talk entitled "Adventures in Northwest Florida Jungle Archaeology."

The room at the Collier County Historical Museum in Naples was filled to capacity. Dr. Bill Lees, the FPAN Director, gave a short talk on public archaeology prior to introducing Dr. White. The northwest Florida jungle to which Dr. White referred in her title was the Apalachicola Valley, located in the Panhandle. She summarized her findings from her independent work and the work done with students during many summer field schools in chronological order, starting with the Paleoindian period and ending with the Civil War era.

Excavations have turned up Early Archaic fiber-tempered pottery and Fort Walton sites. Recent work on the Yon Mound site uncovered two complete pottery vessels.

One example of the many trials and tribulations of working in a remote and very wet area that she presented was the need for a helicopter to bring in a pump because the channels were too narrow for boats.

She stressed the importance of working with local informants, who for instance, helped her determine the history of a small mound adjacent to an old creek bed. During the Civil War era, Confederate soldiers tried to block off entry to the Apalachicola River by damming one of its tributaries. The result was that the river's course was permanently altered.

Dr. White has added much to the knowledge of Southeastern archaeology and to Panhandle history, and she has recently published *Archaeology for Dummies*.

Digital Archaeology: Digital Schmigital

By Jack Harvey

Clyde Butcher creates masterpiece analogies of Everglades landscapes. His large format cameras form images: Analogies in silver halide chemistry of the scenes before his lenses. The light and dark areas of his darkroom prints are precision analogs of the light and dark areas of Florida scenes. No digital computers required.

But this is true only of Butcher's art gallery quality prints that collectors prize so highly. The irony is that for the beauty he captures to reach millions via newspapers, magazines, the Internet and even most modern coffee table art books, his images must be converted to numbers and processed by digital computers.

Imagine you are examining a Butcher print with a powerful magnifier or microscope. You zoom in on the alligator's eye, then its pupil, then the slit iris, then the bizarre pattern of the iris. As you increase magnification, you reach a point where no finer detail can be seen. The view is all a single shade of gray and you are at the limit of what his large format camera can do, determined by the grain size of his film and the resolution of his lens.

Now measure the single shade of gray, assigning it a number. This is "digitizing," the essence of digital photography. The flatbed scanners many of us own as part of our computer "all-in-one" printers do this well, but to do justice to a Butcher print might require a laboratory-grade scanner.

I picked Clyde Butcher's landscapes as a simple example because they usually are not in color and so a single number describing a gray shade is sufficient. Let a value of zero mean black and 100 mean white. Then 50 is a medium gray and all other gray shades are represented by other numbers between 0 and 100. If we assign the appropriate shade number to every minimum-size area of the landscape, this list of numbers accurately specifies a Butcher image. (And let's call these minimum-size single gray shade areas ***"pixels."***)

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FGCU Summer Archaeological Field School

In conjunction with the Tribal Historic Preservation Office of the Seminole Tribe of Florida, Florida Gulf Coast University is conducting an Archaeological Field School this summer for the first time in its history. Classes will take place at FGCU as well as at the Big Cypress Seminole Indian Reservation from May 12 – June 18th. The Principal Investigator is FGCU's Dr. Mike McDonald.

The focus of the research for the 2009 field season is to attempt to locate archaeological evidence for Fort Shackelford. Fort Shackelford was a federally-commissioned military installation widely believed to have been located on land that is now within the Big Cypress Seminole Tribe of Florida Indian Reservation. The fort was built in 1855 at the beginning of the hostilities which are broadly known as the Third Seminole War.

Archaeological investigations will include both non-invasive work (ground-penetrating radar, mapping, etc.) and invasive work (excavation-based). Several SWFAS members are involved with this project, including Dr. Paul Backhouse, Dr. Alison Elgart, Dr. Rebecca Austin, and Dr. Annette Snapp.

Look for updates on this project as archaeological investigations get underway!

July Field Trip -- Arlene Fradkin & the Wightman Site

Plans are still being finalized but we hope to bring Arlene Fradkin over from Florida Atlantic University to talk about her work at the Wightman site on Sanibel in the 1970s. The Wightman site was part of the same mound complex as the Shell Mound Trail at the J.N. "Ding" Darling National Wildlife Refuge, toured during a recent December field trip.

Fradkin's talk will be at the Bailey-Matthews Shell Museum on Sanibel, which has an exhibit curated by Dr. Bill Marquardt, "Calusa: The Original Shell People," which incorporates Wightman artifacts on loan from the Florida Museum of Natural History in Gainesville. Shell Museum Director Jose Leal, Ph.D., will also give a behind-the-scenes tour of the Museum's collection. There WILL BE an admission fee to the Museum for this program, which is ***tentatively set for Saturday, July 11 but that is not yet confirmed. More info to come.***

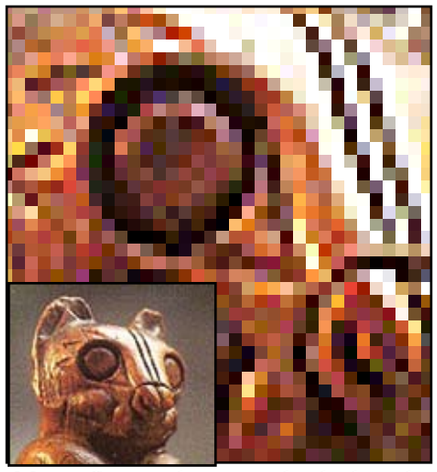
Geology Rules -- from Page 3

Our ever-present digital cameras, from the tiny ones in cell phones to the professional models used by news photographers simply skip Butcher's silver halide chemistry step and produce numbers directly. However they produce three numbers for each pixel so that the trio of values can also specify its color. Each number shows the amount of red, green or blue light needed to reform the color for our primate eyes. When we buy a digital camera that takes six-megapixel photos, it breaks each image down into six million tiny parts (pixels) and records three numbers for each pixel, or a total of 18,000,000 values.

Terms like light, medium or dark gray don't accurately specify grayness. By assigning numbers to the grayness of tiny areas of a Butcher black and white print, we can unambiguously describe it. Our optical instruments can measure grayness or color, as a ruler measures length, assigning a reproducible number. And reproducibility is one criteria of science. The Hubble Space Telescope along with a long list of other scientific imaging devices are digital cameras.

Perhaps the crucial difference between digitization and analog representation is reproducibility. A slide rule is an analog computer, whereas an adding machine is digital. Two slide rule users often get slightly different answers to math problems but adding machines invariably produce exactly the same result.

Our primate eyes are poor at assigning accurate numerical values to shades of gray or color, but they are excellent at comparison. We can tell if one color is darker or lighter, redder or bluer. A century ago Boston-born Albert Munsell showed how to use this ability to accurately assign numerical values to colors. His scheme defined books of precisely colored chips that our eyes can accurately match with unknown target colors. A color chip identification such as "5P 5/10" effectively "digitizes" the unknown color. *Munsell Soil Color Charts* are still used at Craighead Laboratory to record the exact color of pottery sherds by finding the Munsell number of chips in the book that match. These numbers often appear in Florida Anthropologist articles, providing unambiguous digital information about artifact or soil colors.



Marco Cat eye showing individual pixels.

Digital data isn't new to archaeology. When we count otoliths, we digitize their number. When we put a hammer on a laboratory balance, we digitize its weight. Like crop and tax records in the Fertile Crescent scribed into clay, we are now sending our digitized archaeology data to CD-ROMs and through the Internet for accurate reproduction any time or where.

May 2009 Newsletter

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