Central Gulf Coast Archaeological Society

A Chapter of the Florida Anthropological Society

www.cgcas.org

MONTHLY NEWSLETTER

May 2011

Editor: David Burns

Thanks to All Our Speakers this Year

Lucy B. Wayne, Ph.D.

Keith Ashley, Ph.D.

Jon Endonino, Ph.D.

Jana J. Futch

Albert C. Hine, Ph.D.

Sarah B. (Stacey) Barber, Ph.D.

Robin Brown, M.D.

Tatsuya Murakami, Ph.D.

Thanks to all the above speakers that made this year another Lecture Series to remember. Copies of their lectures are available for viewing. We will take the summer off but will begin again in September with another series of talks. Stay tuned. Have a great summer!

FAS Annual Meeting Notes

The annual meeting of the Florida Anthropological Society (FAS) was held in Orlando on May 6-8. Over 40 papers and posters were presented on a wide range of topics. Some of the highlights included Steve Koski's presentation on new artifacts recovered from Little Salt Spring, a series of papers on the Florida Archaic, Jeff Moates' presentation of FPAN's work at Maximo Beach and several papers on historic archaeology. Dr. Glen Doran gave the keynote address at the Saturday night banquet, CGCAS members in attendance included Bob Austin, Chris Hardy, Jeff Moates, Lori O'Neal, Rachel Nostrum, Sheila and John Stewart, Travis Coulliette, Chris Hunt, Jay and Eloise Hardman, Phyllis Kolianos, and Nancy White.

Welcome Our "Newest" Member

We would like to welcome the "newest" member to our "family". Shanna and Jack Drwiega celebrated the birth of their daughter Ava Marie Drwiega on May 9, 2011. Mother, daughter, and father are doing fine and we hope to greet this new arrival soon.

Picnic in the Park

Just a reminder to put the date of June 18, 2011 on your calendar. We will again hold the CGCAS picnic at Lake Seminole Park, Shelter #12, 10015 Park Blvd., Seminole, Fl 33777. This is the site of last year's outing. So please mark your calendar and reserve this date so that you can join us there. CGCAS will supply the meat and drinks so please bring a covered dish to share.

Elections will be held at noon with the picnic immediately following. There will also be drawing for door prizes. We hope to see you there for this day of great food, company, and enjoying the parks many trails and scenery.

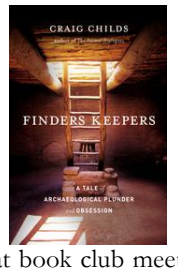
Crystal River Book Club Fieldtrip

Bob Austin talking about the Crystal River Site

Participants at the stele in Crystal River

On Saturday, April 30, nine CGCAS Book Club members went on a field trip to Crystal River Archaeological State Park to tour the site and museum and discuss the latest archaeological research at the site as defined by the Dr. Brent Weisman monograph and the latest technical paper by Dr. Thomas Plukhahn, Victor Thompson, and Brent Weisman. It was a great weather day and a very enlightening visit. They toured the site and discussed all the scientific information to date on the history and features of the site. All came away with new understanding and many unanswered questions remaining to be resolved. It was truly a remarkable event.

Next Book Club



We had a great book club meeting at Crystal River on April 30 and the next book club meeting will June25th at the home of Roger and Jean Block. The book we will be reading is *Finders Keepers: A Tale of Archaeological Plunder and Obsession* by Craig Childs. This is a book about the controversial subject of artifact collecting and addresses one of the questions raised in Skull Wars: Who owns the past? Sounds like it will be an interesting read and will engender lots of discussion.

Research Planned at Warm Mineral Springs

Cross section of Warm Mineral Springs

NORTH PORT -Researchers say they hope to begin some excavations at Warm Mineral Springs in North Port. Dubbed as Ponce De Leon's original Fountain of Youth, hundreds of people from all over the world flock to this natural spot daily. All come to swim in the year-round 87-degree water that is said to heal and nourish but these visitors may not realize the history below their feet as they paddle around."There has been one verified body," said Jodi Pracht, the archaeologist for Sarasota County. "But likely many more that were interred here."Pracht said she believes Paleo Indians may have used this area as a burial site. Several years ago, a human skeleton dating back 11,000 years and other artifacts were discovered in the depths of the springs. Pracht believes there are more. "This represents some of the earliest Americans that we are aware of," said Pracht. "Some 12,000 years old." What makes this site even more unique is the preservation factor. Because of the lack of oxygen and water itself, the human and archeological remains are as close to original as you can get. For years, this spot was untouchable, because it was privately owned. The county and city of North Port recently purchased it. They hope to begin future excavations to reveal what else may lie beneath the water. There is no set date for future research. (*Source: BayNews 9)*

FROM THE STUDIO OF THEODORE MORRIS

Ted Morris would like to allow archaeologists and historians use of his Florida lost tribes paintings for educational purposes.

Contact him at: *www.floridalosttribes.com* and he will email any photos requested for any noncommercial use

Carlos, King of The Calusa

Use of the credit line: Painting (s) by Theodore Morris would be appreciated.

DIGITAL ARCHAEOLOGY: Robot Scientist

By Jack Harvey

Robots are science fiction, right? The name was apparently derived from a Hungarian word for labor and famously used by Karel Capek in his 1920 play "R.U.R.". Variations are automaton, bot, android, droid. They were proposed long ago for performing repetitive "mechanical" tasks such as drawing well water but slave labor was much cheaper. Now, as labor costs rise, there is increasing interest in machines that carry out complex multi-step jobs without close human control.

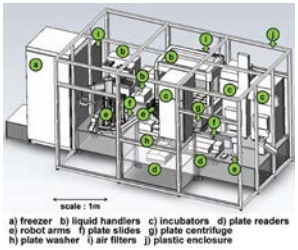


Diagram of Adam

But surely a machine can't be a scientist, proposing hypotheses, testing them, and working toward a deeper understanding of some aspect of nature? There is a team at the University of Wales that has created a robot called Adam that they argue does exactly that. They say, "Adam has autonomously generated functional genomics hypotheses…and experimentally confirmed these…using laboratory automation." Their paper describing this work is *"The Automation of Science",* by Ross D. King, et al. For much more about this, Google: *aberystwyth university adam robot*

We usually think of a robot as being humanoid with two arms, two legs, a body and head. But that's just because we're human. An octopus or insect might have a different model. Adam has none of the usual animal appendages and consists of a large framework filled with various interconnected laboratory devices useful for the scientific area (yeast biology) he studies. The computer controlling all these devices is programmed to select the tests and measurements to perform based on previous results. If test results are "promising", it adjusts the work plan to explore the findings in more detail.

Perhaps Adam is no more than an undergraduate student that doesn't go on Spring Break. However, he is autonomous in that he can select from an array of choices which action to perform next. Of course Adam's criteria for selecting an action are in his controlling artificial intelligence computer program. How is that different from a student?

One of the difficulties we humans have with science is precise communication using our wildly imprecise adjective-ridden natural languages. While the undergraduate might report the results of an experiment as, "Hey, that last test worked great!", Adam specifies the test and results in a formal logical language with empirical data. This is one of the advantages that Ross King, et al, argues.

Many readers of King's paper will feel that it's really a stretch to claim that their machine is a "Robot Scientist". Adam's work might appear to be largely trial and error, like the proverbial monkey at a keyboard writing Hamlet. But Adam's trials are determined by the results of his previous trials and this does mimic science laboratory work fairly well. The controlling computer program (Adam's 'brain") does not simply run a long list of specified tests. Quoting the paper, "A Robot Scientist automatically originates hypotheses to explain observations, devises experiments to test these hypotheses, physically runs the experiments using laboratory robotics, interprets the results, and then repeats the cycle."

Adam's laboratory work was in a tiny specialization of genetics involving a single species of yeast. How can this be relevant to anthropology or archaeology? Certainly the lab tools that Adam used (freezer, liquid handlers, incubators, centrifuge, etc.) have no use in evaluating artifacts.

But imagine we have a Robot Scientist (Eve?) that can identify ceramics. I suggested such a machine earlier in "Artificial Intelligence" that could identify a decorated sherd from any locale on the planet. Eve does this by comparing the decorations and other characteristics with a vast database previously merged from all known pottery types. Now let's imagine that Eve (using another vast database) can also identify the spicule species in the paste used to make each sherd, and can physically separate sherds from soil, stone, shell, flora and fauna fragments. She will weigh and image each sherd in broad and microscopic detail. Eve is a world-class specialist in pottery artifacts that we can load up with a couple of thousand bags of stuff from a dig. She will work 24/7 through these bags with blazing speed, producing an organized database for the dig showing each sherd, its provenience, type, weight, size and probable clay sources. After recording these data for a sherd, she will assign it a unique identifying number and place it in a container marked with that number.

When done with sherd identification, Eve produces a series of tables and charts that summarize results. Alas, however, Eve is logical and can't write the sesquipedal adjective-infested verbiage needed for the typical scientific paper. (Yet.) So a human scientist will need to integrate Eve's results into something that can be published.

When will Eve appear? I don't think she is even on the horizon because human labor is currently cheaper. Still, Adam was built. That robot is not science fiction.

CGCAS Officers\Directors

President	Karin Lovik	1225 Jeffords St. Apt 225A, Clearwater, FL	(727)543-6912
Vice Pres	Bob Austin	P.O. Box 2818, Riverview, FL 33568	(813)677-2280
Secretary	Linda Allred	5251 42nd Ave N., St. Petersburg, Fl 33709	(727)526-7885
Treasurer	Cheryl Shaughnessy	6100 62nd Ave. N, Lot63, Pinellas Park, 33781	(727)742-6758
Directors	Bart McLeod	2412 Butte Ave., New Port Richey, FL 34653	(727)815-8749
	Marcie Connors	19327 Wind Dancer St., Lutz, FL 33558	(813)920-4198
	Jeff Moates	7924 24th Ave. W. Bradenton, Fl 34209	(813)396-2325
	Chris Hardy	11924 Cypress Crest Cir., Tampa, Fl 33626	(813)920-2353
	Sheila Stewart	2130 Burlington Ave. N., St. Petersburg, Fl 33713	(727)894-2832
	Cindy Martin	3412 Forest Bridge Cir., Brandon, Fl 33511	(813)654-4828
Membership	Karin Lovik	1225 Jeffords St. Apt. 225A, Clearwater, Fl	(727)543-6912
Web Master	Diane Kloetzer	5380 Memorial Highway, Apt. 701, Tampa, Fl 33615	(813)281-9662
Newsletter	David Burns	15128 Springview St, Tampa, FL 33624	(813)968-7910
		e-mail: daveburns@prodigy.net	
Editorial Assistants		Dorrine Burns and Bob Austin	

The Society

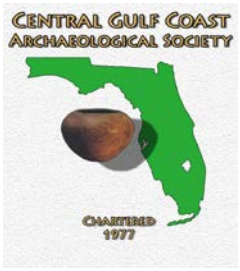
Central Gulf Coast Archaeological Society (CGCAS) is an association of amateur and professional archaeologists and concerned citizens dedicated to the preservation and interpretation of Florida's great cultural heritage. CGCAS is a chapter of the Florida Anthropological Society (FAS) and is a state chartered non-profit organization. All contributions are tax deductible.

Membership

Membership is open to anyone with a sincere interest in the cultural past of Florida and who is dedicated to the understanding and preservation of that heritage

Amateurs, professionals and concerned citizens are welcomed as members. Membership is yearly and all dues are payable in January. Contact Karin Lovik, 1225 Jeffords St., Apt 225A, Clearwater, FL.

Dues	
Regular	$20.00
Student	10.00
Family	25.00
Life	150.00



Central Gulf Coast
Archaeological Society
P.O. Box 1563,
Pinellas Park, FL 33780-1563