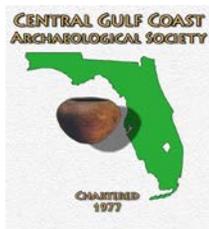

Central Gulf Coast Archaeological Society

A Chapter of the Florida Anthropological Society

www.cgcas.org



MONTHLY NEWSLETTER

December 2011



Editor: David Burns

December Meeting

Thursday December 15th

at

**Weedon Island Preserve Cultural and Natural History Center
1800 Weedon Dr. NE, St. Petersburg, FL 33702**

7 – 8 PM.



Competition and Cooperation at Crystal River.

This month's program will feature Thomas J. Pluckhahn, Ph.D. Dr. Pluckhahn is an Associate Professor of Anthropology at the University of South of Florida (USF).

The Crystal River site, located on the west-central Gulf Coast and dating primarily to the Woodland period (ca. 1000 B.C. to A.D. 1000), is one of the most important sites in North America. It remains poorly understood due to the limited scope and under-reporting of previous investigations. The Crystal River Early Village Archaeological Project, a joint project between the University of South Florida and Ohio State University, seeks to remedy this problem. With support from the National Science Foundation, the first phase of field investigations has recently been completed, including a geophysical survey, coring, and test excavations. The objective is to examine the dynamic between cooperation and competition in the formation of early village societies, using Crystal River as a case study.

Pre-register for this event by visiting www.pinellascountyextension.org, clicking the "Online Registration" button, and then choosing the "Weedon Island" tab. You can also call 727-453-6500 to register.

Holiday Party 2011

December 10

12:00pm-4:00pm

This year's CGCAS Holiday Party is planned for December 10, 2011. It will be held at the AWIARE Research Center located at 1500 Weedon Drive NE, St. Petersburg 33702. This is the maintenance driveway just prior to the Center's entrance. The get together will begin at 12:00 p.m. and continue to around 4:00 p.m. It will feature the usual gag gift exchange as well as a potluck meal. Since this is on county property, no alcoholic beverages are allowed. Also, since we are still in the process of obtaining items for the Research Center, we will need some more seating. If you have an extra chair we can borrow for the day, we'd appreciate your bringing it.

This Month's Speaker

Our speaker this month is Thomas Pluckhahn, Ph.D. Dr. Pluckhahn received his Ph.D. in Anthropology from the University of Georgia in 2002. He came to USF from the University of Oklahoma. Areas of Interest include: Eastern United States Prehistory; Mesoamerican Prehistory; Cultural Resource Management; Settlement Pattern Studies; Archaeology of Households; Environmental Archaeology; Ceramic Analysis and GIS Application for Anthropology.

The 2011-2012 Lecture Series

- 12/15/2011 **Tom Pluckhahn**, Ph.D. Competition and Cooperation at Crystal River.
1/19/2012 **Jason Wentzel**, M.A. Towards an Archaeology of Florida Tourism.
2/16/2012 **Larry Clayton**, Ph.D. The Other Face of the Conquest: Bartholomé de las Casas. Protector of American Indians
3/15/2012 **James Strange**, Ph.D. TBA
4/19/2012 **Clete Rooney**, M.A. TBA

Dues are Due

The annual payment of membership dues for CGCAS is in January of each year. This would be a good time to give CGCAS the gift of your continued membership.

Dues can be paid through Paypal or by mailing a check to Cheryl Shaughnessy, the Membership Secretary at 6100 62nd Ave., N. Lot 63, Pinellas Park, FL 33781.

Membership in the Florida Anthropological Society

Those of you who are not members of our parent organization, the Florida Anthropological Society, are encouraged to consider becoming a member. FAS are a wonderful organization that promotes archaeology throughout the state. Membership for individuals is only \$30/year, family is \$35/year, and student membership is only \$15/year. With this membership you receive four issues of the Society's journal, The Florida Anthropologist, which regularly publishes high quality articles on Florida archaeology,

anthropology, and history. For example, the recent issue has an article about gunflints from the site of Fort Brooke in Tampa, an article on Seminole colonization of Florida in the 18th century, another on canoe travel between the Caribbean and Florida, and a summary of this year's annual meeting which was held in Orlando, including abstracts of all the papers presented at the meeting. You also receive four issues of the Society's newsletter edited by our own Dave Burns. FAS is a major supporter of Florida Archaeology Month, holds an exceptional annual meeting each year (in 2012 it will be in Tallahassee at Mission San Luis), and is implementing a Student Grant this year to assist college students in anthropology with their research expenses.

Membership in CGCAS does not automatically make you a member of FAS and according to the FAS bylaws, each FAS chapter must maintain at least 10 members who also are members of the parent chapter in order to preserve its chapter status. CGCAS currently exceeds that threshold by a large margin (41, and thanks to all of you!), but in general membership in FAS has been declining over the past few years and in order to continue to maintain the high quality of services provided by the parent organization without raising dues, we need more members. It's as simple as that.

If you are interested in learning more about FAS, go to <http://www.fasweb.org/> where you can either download a membership form to print out and mail in with your dues; or pay on line via PayPal. You can also find a digital archive of past issues of the journal under Publications.

Our goal is to have at least half of our 94 members as FAS members. Please consider joining! Thanks.

Editor's note: This was submitted by Bob Austin, immediate past President of FAS and current CGCAS President. CGCAS members have taken an active role in FAS for many years. Several of the past Presidents have come from the ranks of CGCAS including: Bob Austin, Sheila Stewart (twice) Dave Burns, and Loren Blakeley. Others had held positions such as Membership Secretary, Vice President, The Florida Anthropologist Editor, board members, and as Chapter Representatives. Your membership in our parent organization is important and will help FAS continue to promote and protect Florida's rich heritage.

Pinellas by the Decades: A Centennial Celebration

The November 13th lecture at Heritage Village presented by Jim Schnur and Phyllis Kolianos described below, is now available on You Tube. You can link to the video at: http://www.youtube.com/watch?v=pdzKo_Ip1QQ

1922 – 1931: "The Land Boom and Distant Clouds on the Horizon"

This lecture focused on the Florida land boom during the 1920s. Although much of the real estate boom took place in St. Petersburg, ripples of economic activity covered the entire county. Frenzied speculation brought many investors and seasonal residents to the area, and the opening of the Gandy Bridge connected lower Pinellas with industrial

activities across Tampa Bay. The boom began to wither by 1926, with its demise hastened by hurricanes in 1926 and 1928 that devastated portions of Florida and served as knock-out punches long before the rest of America entered the global depression in October 1929.

Lectures 1 & 2 of the series are also available at www.youtube.com/pcctv1. There are no lectures in December due to the holidays; lectures will resume in January.

Thanks go to Lou Claudio for his editing of these lecture videos and getting them to you tube.

DIGITAL ARCHAEOLOGY: Digging Underwater

By Jack Harvey

We know all about this, right? We've been on field trips to Little Salt Springs and Warm Mineral Springs near North Port, FL and heard lectures by John Gifford or Steve Koski of the University of Miami about underwater archaeology. And we've read about the exploits of William Royal and our late Jean Belknap exploring these great sinkholes. Fabulous stuff.

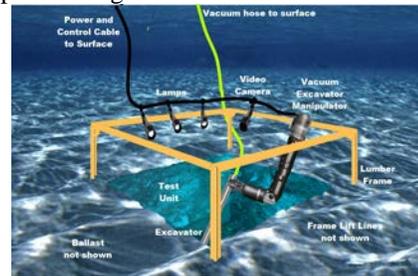
Fabulous, like John Carter of Mars? Pulp master Edgar Rice Burroughs created Carter in 1912, the same year he gave us Tarzan of the Apes. We are fascinated by people in strange dangerous places. Mars is pretty hard to get to, but in Florida, we are surrounded by water and going under it can be strange and dangerous too. Scuba diving requires special equipment and professional training. While diving a few dozen feet is fairly safe and easy to learn, when one goes deeper, it gets tricky and a human can't stay long because of the great pressure. Nitrogen dissolves in our blood causing narcosis. And then when we try to surface quickly, the nitrogen fizzes out causing "the bends" and severe tissue damage.

One thing that helps is to eliminate nitrogen and carbon dioxide, breathing a mixture of oxygen and helium but this only helps a little. Humans simply can't survive the high pressures of depths below a hundred feet longer than a few minutes. Pressure protection suits that permit the diver to remain in a surface-like atmosphere are extremely heavy and expensive while greatly limiting the wearer's mobility and dexterity. The underwater oil well industry used such suits until they developed the ROVs (remotely operated vehicles) that were the eyes and hands of the historic BP Deepwater Horizon blowout disaster recovery effort in 2010. Unfortunately, the lease costs for those kinds of ROVs run to tens of thousands of dollars *per day!*

Another scheme for humans to work below the surface for extended periods of time is the underwater habitat. This is a pressurized air-filled tank that divers can live in for several days at a time. Being at the same pressure as the sea outside, scuba divers can exit and return through openings in the bottom without hatches. Starting in the 1960s, several experiments and facilities were tried by Jacques Cousteau. The US Navy and other government groups tried various approaches. These were all high-budget experimental programs and none resulted in continuing working facilities.

DIY hobbyists have had some success with home-made deep-diving ROVs using remote controllers adapted from model aircraft.

Their goals are usually returning digital photos and video from as deep as 10,000 feet. The *National Geographic Channel* (NETGEO) has a series called "How Hard Can It Be?" A recent episode described the attempt by hobbyists to build and test a DIY robo-sub. While their main goal of a maneuverable vehicle failed for lack of time, they did succeed in returning video from a low cost static platform lowered to great depths. Google "DIY robo-sub" to find the hobbyists.



"Lumber frame for surface-controlled test unit digging underwater."

Underwater archaeology, similar to what Steve Koski does with scuba gear in Little Salt Spring, can be done with a simple lumber frame lowered into place over a test unit. The frame has pressure-proof video cameras and lights to view progress and locate artifacts. It supports and manipulates the vacuum hose that Steve uses to remove silt from the dig. Small artifacts go up the vacuum hose to be recovered in a filter screen on the surface. A scuba diver makes a quick trip down for large and important items. The big advantage of such a frame over ordinary scuba diving is that the frame can stay in place and work as long as archaeologists on the surface want to control it. And it works continuously at depths where scuba diving is extremely difficult with useful time limited to a few minutes a day.

Initial versions of this underwater archaeology frame can be constructed of ordinary lumber, weighted to get it to sink. The hobbyists have shown how to build low-cost pressure housings for video cameras and lights. They learned to fill electric motors with light oil for operation at extreme depth without special pressure protection. Current scuba-oriented underwater archaeology facilities (such as Little Salt Spring or Mote Marine Laboratory) can fairly easily build and test such a frame. Cost might be only a few thousand dollars. (Hobbyists talk about a few hundred dollars.)

Once a working archaeology frame is proven in an established facility such as Little Salt Spring, it can be dropped from a boat or barge anchored over likely sites in the Gulf of Mexico. Since all underwater archaeology sites are no deeper than the lowest ocean surface during extreme ice ages, the archaeology frame probably has no need to work more than 400 feet down with about 200 PSI pressure, and most sites are shallower. So there is no requirement to shoot for the 10,000 foot, 5,000 PSI capabilities that some hobbyists are trying to achieve. The main need is for collaboration between university anthropology departments and enthusiasts in engine school studying robotics. Several universities, including two in Florida have active robotics groups. This isn't some futuristic dream; the technology is available today.

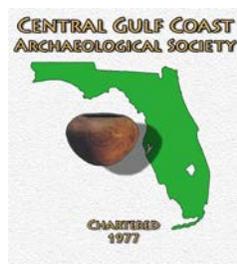
What are we waiting for?

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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.



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

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 Cheryl Shaughnessy at the address above or at shaughnc@tampabay.rr.com.

	Dues
Regular	\$20.00
Student	10.00
Family	25.00
Life	150.00

