

CONSERVATION EDUCATION

PRESERVATION EXPLORATION



Newsletter of the Indian Peaks Chapter of the Colorado Archaeological Society November, 2005

CALENDAR OF EVENTS

General (lecture) meetings are held in the University of Colorado Museum, Dinosaur Room Second Thursday of each Month, at 7:00 PM. The public is always welcome.

November 9	PAAC Class (session 2 of 7)		
November 10	Presentation Meeting – Jean Stuck, Topic: Historic Forts		
November 16	PAAC Class (session 3 of 7)		
November 22	PAAC Class (session 4 of 7)	Inside This CALUMET	Γ
November 30	PAAC Class (session 5 of 7)	Calendar of Events	1
December 1	Executive Board Meeting, 7:30PM at The Atrium.	Membership Renewals	1
December 7	PAAC Class (session 6 of 7)	Annual Christmas Party	2
December 8	Annual Christmas Party. See Page 2.	Archaeologists and SETI	2
December 14	PAAC Class (session 7 of 7)	Getting The Point	3
January 5 January 12	Executive Board Meeting, 7:30PM at The Atrium. Presentation Meeting – Dr. Bob Brunswig. Topic is "Roman Archaeology in Roman Gaul".	Rain Forest Protection Ute Mountain Tribal Park Executive Board Minutes Officers/Board Members	4 6 7 8
February 2 February 9	Executive Board Meeting, 7:30PM at The Atrium. Presentation Meeting – Steve Holen. Topic is To Be Determined.	Membership Application	8
March 2 March 9	Executive Board Meeting, 7:30PM at The Atrium. Presentation Meeting – Dr. Nicole Waguespack. Topic is "Re	cent Excavations at Barger Gulch	1.

Membership Renewals

Expired in July: Russell D. Smith Expired in August: James Egarton

Expired in October: Wayne Gilbert Jr., Jeannie Hamilton, William Jones, Richard Owens, Laura Viola

Renewed in August: Joanne Morgan

New in September: Robin Hardin and Sara Michl

Renewed in October: Tom Cree, Cheryl Damon, Piper Prillaman Herron, Ken Larson, and John & Kathy Wilson

Glad you are with Indian Peaks!

Annual Christmas Party

The IPCAS Holiday Party will begin at 6:30 PM Thursday, December 8, at The Atrium, southeast corner of 30th and Iris. Parking is available along Iris to the north and in the merchant parking lot across 30th.

Our Holiday Party is a potluck dinner and fun get-together. The club provides the table service, utensils, and the beverages. Each person (or couple) attending brings one main dish and one salad/dessert to share. Plan on 25 people attending.

We also feature the White Mammoth Exchange. Each person brings a wrapped gift for exchange. Gifts should be something that you no longer need, no longer want, and are tired of looking at. Not-so-great gifts are the norm. The White Mammoth Exchange is very exciting and a fun end to our program year.

Archaeologists Assist SETI NASA

The images are vivid, capturing the essence of exploration - Archaeologists digging up the remains of long lost civilizations and Anthropologists encountering exotic cultures with strange languages. But do archaeologists and anthropologists have anything to teach the Search for Extraterrestrial Intelligence (SETI), where encounters are at the distance of light-years, and a round-trip exchange could take millennia?

"Absolutely!" was the resounding response at a conference held last year of the American Anthropological Association. One of the best-attended sessions of that meeting consisted of papers from leading scholars who pondered the daunting challenges of reconstructing alien civilizations – at interstellar distances. A month earlier, in November 2004, many of the same scientists had gathered at the SETI Institute for a symposium fittingly called "In Search of a Cosmic Rosetta Stone," a reference to the slab of basalt that provided the key to decoding Egyptian hieroglyphics.

Analogies of Contact "The approaches we take as archaeologists in our search for peoples from another time and place may well offer some useful analogy to the search for extraterrestrial intelligence," suggested archaeologist Paul Wason, one of the participants. "Our work is conducted without the benefit of direct contact with living beings," he observed, which is akin to SETI's attempt to detect intelligence around distant stars. But how can analogies help us anticipate contact with extraterrestrials?

For starters, by providing a case study of *Homo sapiens* encountering an alien intelligence, Wason explained. "The meeting of Neanderthals and *sapiens* may be a good example for analogy—for it was a meeting of two different kinds of consciousness," he added. But be forewarned as we start to draw lessons for SETI from such encounters, Wason urged. The analogy may be humbling. "It may be that in such a comparison of us with ETI, ...we are the Neanderthals," he said.

Our Place in the Universe And yet, isn't all of this work premature? Shouldn't we wait until at least knowing that intelligence exists beyond Earth? Psychologist Albert Harrison didn't think so. He argued that as we contemplate contact with other worlds, we have an opportunity to gain a better perspective on ourselves. "Planned efforts to communicate beyond Earth should force us to step back and look at the big picture," said Harrison, a professor at the University of California at Davis. "Deciding what might be important for another civilization forces us to move beyond our pathologically narrow time span and develop a long term perspective." Even if we never make contact, Harrison observed, we might reap significant benefits by pondering these issues now.

"Determining what we should say and who should say it could be a useful self-study that fosters self-contemplation and encourages consensus," Harrison noted. "These deliberations should encourage us to think about what makes us human, where we are going, and how we conceive of our place in the universe."

Getting the Point Agate Basin



Projectile Point Type: **Hell Gap** Period: Late Paleo, 10900 to 9000 B.P. Range: Northern states to Canada.

Material of this point: Mahogany Obsidian

Source of this point: Modern Replica by Jeff Ferguson, IPCAS member

Hell Gap - A medium to large size, narrow, long stemmed point with weak, tapered shoulders. Base can be concave, convex, or straight. The basal area is usually ground.

Colorado *Hell Gap* point materials include alibates chert, knife river chert, flat top chalcedony, and petrified wood. This point as made by Jeff is very similar in form to a petrified wood point found in Pueblo.

Archaeology Used to Protect the Rain Forest

NASA, September 29, 2005

A thousand years ago, Mayan civilization collapsed. Today, a Space Age "situation room" in Panama is helping Central Americans avoid mistakes that doomed the Maya. Central America, that narrow land bridge between North and South America, represents less than 0.5 percent of Earth's land mass. But it is home to 7 or 8 percent of the world's species of plants and animals.

That rain forest home, however, is assaulted by both nature and man: earthquakes, hurricanes, illegal logging and ranching, and deforestation from slash-and-burn agriculture. Now, NASA scientists are helping Central America keep watch on its biological treasures and stop environmental depredations through SERVIR, an acronym standing for the

Spanish words meaning Mesoamerican Regional Visualization and Monitoring System. SERVIR is not a satellite. Instead, it's a "situation room" or "nerve center," which opened in Panama in February 2005. There, scientists use a whole constellation of existing NASA, commercial and international satellites observing Earth at visible, infrared, and radar wavelengths. They combine satellite data with ground observations, and speed the results to national leaders, who then can make informed political decisions about environmental management or disaster response.

Right: A Sept. 28, 2005, Aqua-MODIS satellite image of Central America.

For example, "every year there are terrible fires across Central

America because of slash-and-burn agriculture," says Dan Irwin, SERVIR project manager at NASA's Marshall

Space Flight Center. Such fires used to rage out of control—until two years ago, when Irwin and other SERVIR

partners invented a system for identifying "fire hotspot pixels" on satellite images. Today SERVIR's fully-automated
fire detection system notifies field teams and rapidly guides them to the site using GPS. Firefighters can reach a fire

(often in a remote area) and fight it while it is still containable.

This kind of environmental monitoring is important to a region that has seen the collapse of at least one grand civilization, that of the Maya. There's mounting archeological evidence that the once proud Mayan civilization, with 10 million citizens throughout Mesoamerica a thousand years ago, may have been due to colossal environmental foolishness. "The Maya had totally destroyed their forests," Irwin explains. "That deforestation and local climatic conditions, we believe, led to such a severe drought that ... the entire Maya culture disappeared in just a few years." Below: Mayan ruins in Guatemala.



If only the Maya had had SERVIR. The system is able to monitor deforestation, drought and much more.

Recently, SERVIR revealed its power to pinpoint red tides--harmful blooms of red algae that periodically overspread parts of the Atlantic and Pacific oceans on either side of Central America, poisoning fish Historically, red tides have cost local fishing industries millions of dollars a year, because customers become scared to eat any ocean fish at all. But using data from the Aqua satellite, a team from SERVIR "figured out how to identify the exact locations of a bloom," Irwin says. When a red tide struck off the coast of El Salvador in June 2004, "an environmental official was shown eating fish on TV, to demonstrate that fish caught outside a red tide was still safe—and that SERVIR showed where it was still safe to fish," he says. "We were thrilled!"

SERVIR also does weather. "Central American nations often cannot afford the weather radar systems common in United States," says Irwin. So, SERVIR has joined forces with the NASA Short-term Prediction Research and Transition Center (SPORT) to forecast weather 24 hours in advance using a computer-model that takes into account precipitation, wind speed, temperature, and dew point. "The SERVIR forecasts are so popular they're even being used for weather predictions on Central American TV news."

The origins of SERVIR can be traced as far back as 1986 when Irwin's colleague Tom Sever, NASA's only archaeologist, acquired a satellite image of northern Guatemala to examine it for archaeological sites. As soon as he glanced at the image, Sever "was stunned that he could see the political border between Guatemala and Mexico, because of the deforestation in Mexico," Irwin recalls.



Above: The razor-sharp border between Mexico and Guatemala, as seen in this 1988 Landsat image, shows the impact of rural settlements on the rainforest.

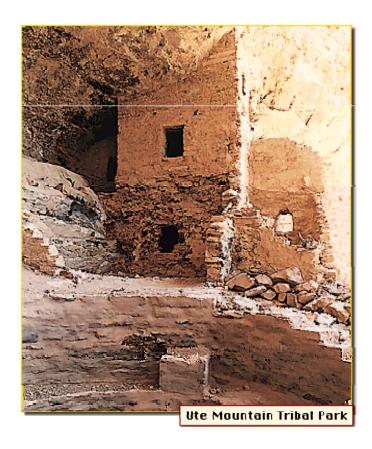
The image was so powerful, it was published in National Geographic magazine, and became a catalyst for the president and congress of Guatemala to set up what they call the Mayan Biosphere Reserve—Guatemala's largest protected area. The Mayan Biosphere Reserve led, in turn, to the creation of something even bigger: the Mesoamerican Biological Corridor, an environmental greenway the length of Central America, connecting parks and preserves among all Central American nations. NASA has helped monitor this so-called "biocorridor" from space, primarily from 1999 to 2002. "I came to NASA to work with Sever on that project," Irwin recalls. 2002 was a key year in the development of SERVIR. That was when Irwin attended a meeting with the environment ministers of all countries, who said they wanted an integrated system to produce information not only on the forests, but also on the oceans.

"I envisioned a 'dashboard' of environmental-monitoring capabilities," says Irwin. Just as a dashboard of a car brings together information from all over the vehicle, so would SERVIR gather information from many satellites and sensors. "The U.S. Agency for International Development and The World Bank offered funding, and we've teamed with these groups to make SERVIR a reality." SERVIR's approach could take over the world. Its operations are serving as a model for NOAA's Global Earth Observation System of Systems (GEOSS). GEOSS is seeking to be for the entire world what SERVIR is for Central America—a clearinghouse for combining data from the myriad of Earth-observation satellites in the sky—as well as ground based and other data—to provide useful, customized information fast to decision-makers worldwide.

The dramatic lesson from the Maya is clear for Irwin: "The idea behind SERVIR, and GEOSS, is not to repeat the mistakes of the past."

Ute Mountain Tribal Park

Part of the Ute Mountain Ute Indian Reservation, the Ute Mountain Tribal Park has been set aside to preserve remnants of the Ancestral Puebloan and Ute cultures. It has been selected by National Geographic Traveler as one of "80 World Destinations for Travel in the 21st Century", one of only 9 places in the United States to receive this special designation.



The Park encompasses approximately 125,000 acres around a 25-mile stretch of the Mancos River. Within the park are hundreds of surface sites and cliff dwellings, Ancestral Puebloan petroglyphs, and historic Ute wall paintings and petroglyphs. The Tribal Park is operated as a primitive area in order to protect its cultural and environmental resources. Emphasis is placed on experiencing the natural setting. Tours are guided by Ute Indians with a broad knowledge of Ute and Ancestral Puebloan cultures. The tours include Ute history and rock art, surface sites and cliff dwellings. The full day tour (which is highly recommended) visits four magnificent cliff dwellings and requires a three-mile walk on unpaved trails and scaling ladders. In order to protect the fragile resources, self-guided tours are not permitted.

VISITING the TRIBAL PARK

Tours begin at Tribal Park headquarters located approximately 20 miles south of Cortez on Highway 666. Round-trip drive from the Visitor Center, on gravel and dirt roads, is 80 miles for the full-day trip, and 40 miles for the half-day trip. No food or water is available in the park. Tours are offered April through October. Reservations are required. For information on the park and tours, visit their site at http://www.swcolo.org/Tourism/Archaeology/utemtn.html. Recommended visitation time is one day. If you choose the ½-day tour you may want to combine your visit with a stop at the Four Corners Monument. The full day tour is the only way to visit the cliff dwellings.

Executive Board Meeting

September 1, 2005

Meeting called to order at 7:30 PM at the Atrium in Boulder.

Attendees: Cheryl Damon, Kris Holien, Tom Cree, Joanne Turner, Christine O'Toole

Secretary's Report (O'Toole): Accepted as is.

Treasurer's Report (Pitre): Unavailable at meeting due to absence.

President's Report (Damon and Holien):

- Kris offered to collect and transport small auction items to the monthly meeting to raise funds for the Alice Hamilton scholarship fund
- There was discussion about denim shirts available for sale with the state CAS logo for approximately \$28. Order forms will be brought to the monthly meeting.
- Tom will bring Calumets to the monthly meeting.
- Raffle tickets for a beautiful Navajo Squash Blossom Necklace to raise money for CAS will be brought to the monthly meeting by Kris
- The signup for the PACC class will be brought to the monthly meeting.

Old Business:

- Reggie has purchased "Guns, Germs and Steel" which will be available for meetings if our speaker does not show. Christine brought in tapes from the Longmont library on relevant topics for the same purpose. Tom will review the tape about Lyons Sandstone operations and Christine will review the other tapes.
- Cheryl says Jean Stuck has agreed to speak on historic forts for November.
- Steve Holen has agreed to be a speaker and will let Cheryl know which month.
- Cheryl is checking into a possible trip to Fort Carson in October. It may have to wait until next spring.

New Business:

- Lyons survey will be on October 15, per Tom.
- Christine will bring refreshments for next monthly meeting.
- Kris and Tom were talking about advertising for the next monthly meeting in the Longmont paper and the Colorado Daily
- Elections are in November and we might need a treasurer. Joanne Turner might be interested.

Open Floor: none

Meeting Adjourned at 9:00 PM, - Christine O'Toole, Secretary -

Executive Board Meeting

October 5, 2005

Meeting called to order at 7:30 PM at the Atrium in Boulder.

Attendees: Cheryl Damon, Kris Holien, Tom Cree, Joanne Turner, Christine O'Toole, Rick Pitre, Reggie Hofmaier Secretary's Report (O'Toole): Amended per suggestions.

Treasurer's Report (Pitre):

- 2 new members
- Haven't received money from garage sale yet
- Will pay Foothills Nature center for rent for PACC class in 2 weeks
- No other expenses before end of year except Christmas Party

President's Report (Damon and Holien):

- Kris will contact RA about doing a presentation
- Marcia Ritchie is restoring LaPrele Ranger station
- Annual meeting will be near Mesa Verde. The Wrights did a hydrologic study of Mesa Verde
- At the annual meeting at Sand Dunes election for state officers will be held. They are looking for a new VP.

Old Business:

- White Rocks trip won't be happening
- Pinyon Canyon trip may be able to happen in January. It may be a day and a half trip.
- Tom said the video on Lyons Sandstone operations would probably not have general interest for a meeting.
- Christine presented a short list of videos from the Longmont Public Library that might be good to use when a speaker doesn't show up.

New Business:

- The El Pueblo Museum, Hover House or Callahan house might be good day trips.
- Maybe a trip to Ft. Vasquez, Ft. St. Vrain, and Ft. Lupton could be combined after our meeting on Forts
- Rick is going to get a membership list from Laurie and check it against our list.

Open Floor: none

Meeting adjourned at 9:00 PM, - Christine O'Toole, Secretary -

2005 IPCAS Officers, Board Members, and major functions

Co-President	Cheryl Damon	(303) 678-8076	cherdam@cs.com
Co-President	Kris Holien	(970) 586-8982	kjholien@aol.com
Secretary	Open		
Treasurer	Rick Pitre	(303) 673-0272	rpitre@kryos.colorado.edu
Professional Advisor	Dr. Robert Brunswig	(970) 351-2138	robert.brunswig@unco.edu
Calumet Editor	Tom Cree	(303) 776-7004	tomcree@earthlink.net
Internet Manager	Piper Herron	(303) 988-0814	codirtnerd@comcast.net
PAAC Coordinator	Jim Morrell	(303) 678-7642	j.s.morrell@att.net
CAS Representative	Reggie Hofmaier	(720) 684-1181	reginald.hofmaier@seagate.com
Archivist/Librarian	Kris Holien	(970) 586-8982	kjholien@aol.com
Board Member	Pete Gleichman	(303) 459-0856	pjgleichman@yahoo.com
Board Member	Jeff Ferguson	(720) 890-2708	fergusonjeff@hotmail.com
Board Member	Joanne Turner	(303) 494-7638	joanne.turner@colorado.edu

Please check the chapter web-site at: http//www.indianpeaksarchaeology.org

Individual \$28.50 / YearFamily \$33 / YearStudent \$14.25 / Year, with Ca	Renewal		
NAME	TELEPHONE ()		
ADDRESS	E-MAIL		
CITY	STATE ZIP		
Please make check payable to:	Indian Peaks Chapter, CAS		
Mail to:	PO Box 18301		
	Boulder, CO 80308-1301		

CALUMET

Newsletter of the Indian Peaks Chapter of the Colorado Archaeological Society P.O. Box 18301 Boulder, CO 80308-1301