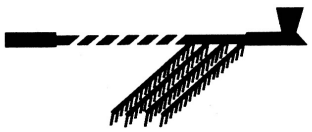
CALUMET



Newsletter of the Indian Peaks Chapter of the Colorado Archaeological Society
October, 2011

CALENDAR OF EVENTS

Presentation (lecture) meetings are held in the University of Colorado Museum, Dinosaur Room on the Second Thursday of most Months, at 7:00 PM. **The public is always welcome**.
Web Site: WWW.INDIANPEAKSARCHAEOLOGY.ORG

November 3 Boulder PAAC, Colorado Archaeology (session 3)
November 4 IPCAS Executive Board Meeting, 7:30PM
November 10 Boulder PAAC, Colorado Archaeology (session 4)
November 11 **IPCAS Presentation Meeting**, 7PM. See Below
November 17 Boulder PAAC, Colorado Archaeology (session 5)
November 21 Party at Phillips' Home, 2PM to 5PM, see page 2

December 1 Boulder PAAC, Colorado Archaeology (session 6)
December 2 IPCAS Executive Board Meeting, 7:30PM
December 8 Boulder PAAC, Colorado Archaeology (end, session 7)
December 9 **IPCAS Christmas Party**, 6PM St. Andrews Presbyterian Church, 2700 Baseline Road, Boulder. White Mammoth Gift Exchange- Bring a wrapped used gift for the White Mammoth Gift Exchange. Your used item can be a gift for someone else.

Inside This CALUMET

January 13 **IPCAS Presentation Meeting**, 7PM. Laurie White. Topic: TBD.

January 27 **Archaeology Discussion Group**, 7:00PM. Meeting Location: Boulder Library Meeting Room This months Topic: The Anasazi Ready - anything you wish on the topic of the Anasazi. We will also pick the March meetings topic.

February 10 **IPCAS Presentation Meeting**, 7PM. Caitlin Sommer, Masters Candidate, CU-Boulder. Her topic is "Research on Feathered Artifacts in the Mantle's Cave Collection at the CU Museum". Caitlin received a 2010 Alice Hamilton Scholarship to obtain one AMS date for a sample of one of the feathered artifacts.

March 10 **IPCAS Presentation Meeting**, 7PM. David T. Williams, Masters Candidate,CU-Boulder. David's topic is "Research on Lithic Assemblages within the Lower Rio Verde River Valley region of Oaxaca, Mexico". David received a 2010 Alice Hamilton Scholarship for living expenses and to obtain sourcing analysis of obsidian artifacts at the University of Missouri Research Reactor (MURR) using X-Ray Fluorescence Spectrometry (XRF).

March 24 **Archaeology Discussion Group,** 7:00PM. Meeting Location: TBD

April 14 **IPCAS Presentation Meeting,** 7PM, Dinosaur Room, Dr. Robert Brunswig. Topic is the Dearfield Project (there will be volunteer opportunities in June/July).

June 9 **1st Annual IPCAS Picnic Potluck Picnic**, Thursday, June 9 at 6:00PM at Betasso Preserve, Boulder County Open Space - Bring a dish to share.

November Presentation

Our November Speaker is J. McKim Malville. Kim Malville was trained as a solar physicist, but over the last several decades he has written extensive on topics of archaeoastronomy, particularly of the American Southwest and South America. His topic is "The People, the Moon, and the Great House at Chimney Rock". The meeting is at 7PM in the Dinosaur Room of the CU Museum.

IPCAS Board Members - Requesting new board members for 2011

This month we will be voting IPCAS officers in for the next year. As all of you must know, last winter we can very close to closing IPCAS. A small group of joined the board to try to keep the group going. Several of the current board members graciously agreed to continue their work to support the group. Between all of us, we made it another year. We are still not out of the woods. In order to keep this group going we need to have more people taking an active role in our organization. Please contact one of the current board members if you are interested in any position. We are particularly anxious to fill the positions of Newsletter editor and Web administrator. Please let us know if you are interested.

Open positions:
Newsletter editor, Web administrator, Membership Chair, CAS Representative, Field Trip Chair, Outreach coordinator, and Secretary

Proposed nominees for 2011 positions:
President - Anne Robinson
Vice- President - Karen Kinnear
Treasurer - Carolyn Camell-Coppin
Professional Adviser Dr. Robert Brunswig
PAAC Coordinator - Dave Hawley
Archivist/ Librarian - Kris Holien
Board member - Cheryl Damon
Board Member - Kris Holien
Board Member - Joanne Turner

Save the Date - November 21

Ann and Dave Phillips have graciously offered to host a meeting of all interested members at their home at 211 Hawthorne Avenue in Boulder on Sunday, November 21, from 2:00PM - 5:00PM.

The Board would like to get together with interested IPCAS members to talk about membership - what you want out of your membership, how we can reach out to potential new members and encourage them to join IPCAS, your thoughts on field trips and other group activities, and other issues on your mind.

Please bring a light snack (hors d'oeuvres) to share and something to drink. We will provide coffee and tea.

Please RSVP by November 19th to Karen at kinnearkaren@hotmail.com so we have an estimate of how many people to expect.

Indian Peaks Chapter - Archaeology Discussion Group

We are starting an Archaeology discussion group. The purpose of the group is to read and discuss topics in Archaeology to help us all increase our understanding of the topic. As much as we can all enjoy a good lecture, you actually learn more if you discuss what you learned with someone else. This group will give you that opportunity.

How it works: You read something on the topic and discuss it with the group. The reading doesn't have to be huge. The reading doesn't have to be comprehensive on the topic. The reading does not have to be complex. We take a liberal view on the topic so as long as it is sort of related to the chosen topic - that is fine. The objective is to just read something. You can read an article, read part of an article, read a book, or skip a month and just come and enjoy hearing what others have to say. You will find that even reading a small amount you will have plenty to discuss.

A sampling of types of topics we could choose for future meetings: Clovis life, Archaeo-astronomny, Mesa Verde, Prehistoric Hunting, Archaeology and the Santa Fe trail, Cahokia, Rock Art, Folsom camps, Mammoth Hunting, Yellow Jacket site, Cannibalism in the Southwest, Game Drives, Neanderthal people, Basketmaker III culture, Pit house construction, Chimney Rock site, Chaco culture, Prehistoric agriculture, etc. The group will decide which topics to pursue.

Meeting Dates:
January Meeting- Thursday, January 27, 2011 at 7:00 pm Meeting Location: Boulder Library Meeting Room This months Topic: The Anasazi Ready anything you wish on the topic of the Anasazi. We will also pick the March meetings topic.

March Meeting- Thursday, March 24, 2011 at 7:00 pm Meeting Location: TBD, Meeting Topic: To be decided at January meeting. We will also discuss at this meeting how often we want to meet and topics for future meetings.

CHS Museum Support Center Lab Opportunities

The Office of Archaeology and Historic Preservation (OAHP) has archaeological collections that have yet to be completely processed for permanent curation. PAAC volunteers may receive credit toward certification at either the Laboratory Trainee or Laboratory Technician level by helping the State Training Coordinator in the cataloguing and analysis of these materials.

The lab work is usually held at the Colorado Historical Society's Museum Support Center in east Denver (MSCD), on intermittent days in December and January, 8:30AM - 4:30PM.

The specific dates for the lab the coming winter session:

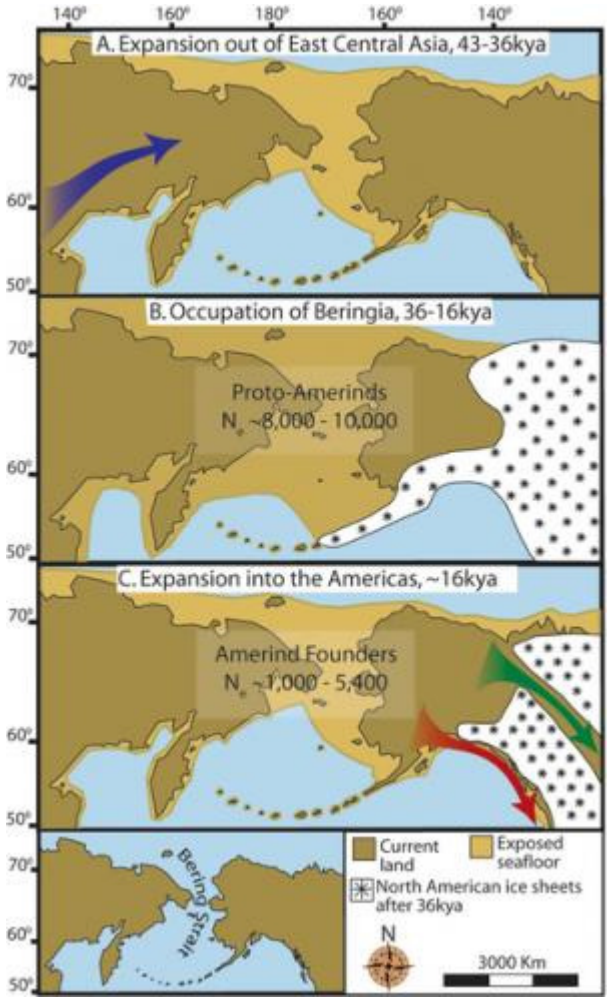
December 2, 7, 15, 17, 18, 21, and 22, 2010;
January 11, 12, 14, 15, 19, 20, 25, and 26, 2011.

Prospective volunteers should contact the State Training Coordinator to participate. All supervised hours spent with specific materials in the collections apply toward the 40 hours of lab time required for certification.

While the collection includes a variety of prehistoric and historical materials, a large majority is lithic (flaked stone and ground stone artifacts).

Thousands Of Humans Inhabited New World's Doorstep For 20,000 Years

ScienceDaily (Feb. 13, 2008) — The human journey from Asia to the New World was interrupted by a 20,000 - year layover in Beringia, a once-habitable region that today lies submerged under the icy waters of the Bering Strait. Furthermore, the New World was colonized by approximately 1,000 to 5,000 people - a substantially higher number than the 100 or fewer individuals of previous estimates.



Maps depicting each phase of our three-step colonization model for the peopling of the Americas. (Credit: Kitchen A, Miyamoto MM, Mulligan CJ (2008) A Three-Stage Colonization Model for the Peopling of the Americas. PLoS ONE 3(2): e1596. doi:10.1371/journal.pone.0001596)

The developments, to be reported by University of Florida Genetics Institute scientists in PloS One, help shape understanding of how the Americas came to be populated - not through a single expansion event that is put forth in most theories, but in three distinct stages separated by thousands of generations.

"Our model makes for a more interesting, complex scenario than the idea that humans diverged from Asians and expanded into the New World in a single event," said Connie Mulligan, Ph.D., an associate professor of anthropology at the College of Liberal Arts and Sciences and assistant director of the UF Genetics Institute. "If you think about it, these people didn't know they were going to a new world. They were moving out of Asia and finally reached a landmass that was exposed because of lower sea levels during the last glacial maximum, but two major glaciers blocked their progress into the New World. So they basically stayed put for about 20,000 years. It wasn't paradise, but they survived. When the North American ice sheets started to melt and a passage into the New World opened, we think they left Beringia to go to a better place."

UF scientists analyzed DNA sequences from Native American, New World and Asian populations with the understanding that modern DNA is forged by an accumulation of events in the distant past, and merged their findings with data from existing archaeological, geological and paleoecological studies.

The result is a unified, interdisciplinary theory of the "peopling" of the New World, which shows a gradual migration and expansion of people from Asia through Siberia and into Beringia starting about 40,000 years ago; a long waiting period in Beringia where the population size remained relatively stable; and finally a rapid expansion into North America through Alaska or Canada about 15,000 years ago.

"This was the raw material, the original genetic source for all of the Americas," said Michael Miyamoto, Ph.D., a professor and associate chairman of zoology in UF's College of Liberal Arts and Sciences. "You can think of the people as a distinct group blocked by glaciers to the east. They had already been west, and had no reason to go back. They had entered this waiting stage and for 20,000 years, generations were passing and genetic differences were accumulating. By looking at the kinds and frequencies of these mutations in modern populations, we can get an idea of when the mutations arose and how many people were around to carry them."

Working with mitochondrial DNA - passed exclusively from mothers to their children - and nuclear DNA, which contains genes from both parents, UF scientists essentially added genetic information to what had been known about the archaeology, changes in climate and sea level, and geology of Beringia.

The result is a detailed scenario for the timing and scale of the initial migration to the Americas, more comparable to an exhaustive video picture rather than a single snapshot in time.

"Their technique of reading population history by using coalescence rates to analyze genetic data is very impressive - innovative anthropology and edge-of-the-seat population study," said Henry C. Harpending, Ph.D., a distinguished professor and endowed chairman of anthropology at the University of Utah and a member of the National Academy of Sciences who was not involved with the research. "The idea that people were stuck in Beringia for a long time is obvious in retrospect, but it has never been promulgated. But people were in that neighborhood before the last glacial maximum and didn't get into North America until after it. It's very plausible that a bunch of them were stuck there for thousands of years."

As for Beringia, sea levels rose about 10,000 to 11,000 years ago, submerging the land and creating the Bering Strait, which now separates North America from Siberia with more than 50 miles of open, frigid water.

"Our theory predicts much of the archeological evidence is underwater," said Andrew Kitchen, a Ph.D. candidate in the anthropology department at UF who participated in the research. "That may explain why scientists hadn't really considered a long-term occupation of Beringia."

UF researchers believe that their synthesis of a large number of different approaches into a unified theory will create a platform for scientists to further analyze genomic and non-genetic data as they become available.

Citation: Kitchen A, Miyamoto MM, Mulligan CJ (2008) A Three-Stage Colonization Model for the Peopling of the Americas. PLoS One 3(2): e1596. doi:10.1371/journal.pone.0001596

Gene Study Supports Single Main Migration Across Bering Strait

ScienceDaily (Nov. 28, 2007) — Did a relatively small number of people from Siberia who trekked across a Bering Strait land bridge some 12,000 years ago give rise to the native peoples of North and South America?

Or did the ancestors of today's native peoples come from other parts of Asia or Polynesia, arriving multiple times at several places on the two continents, by sea as well as by land, in successive migrations that began as early as 30,000 years ago?

The questions -- featured on magazine covers and TV specials -- have agitated anthropologists, archaeologists and others for decades.

University of Michigan scientists, working with an international team of geneticists and anthropologists, have produced new genetic evidence that's likely to hearten proponents of the land bridge theory. The study, published online in PLoS Genetics, is one of the most comprehensive analyses so far among efforts to use genetic data to shed light on the topic.

The researchers examined genetic variation at 678 key locations or markers in the DNA of present-day members of 29 Native American populations across North, Central and South America. They also analyzed data from two Siberian groups. The analysis shows:

- genetic diversity, as well as genetic similarity to the Siberian groups, decreases the farther a native population is from the Bering Strait -- adding to existing archaeological and genetic evidence that the ancestors of native North and South Americans came by the northwest route.
- a unique genetic variant is widespread in Native Americans across both American continents -- suggesting that the first humans in the Americas came in a single migration or multiple waves from a single source, not in waves of migrations from different sources. The variant, which is not part of a gene and has no biological function, has not been found in genetic studies of people elsewhere in the world except eastern Siberia.

The researchers say the variant likely occurred shortly prior to migration to the Americas, or immediately afterwards.

"We have reasonably clear genetic evidence that the most likely candidate for the source of Native American populations is somewhere in east Asia," says Noah A. Rosenberg, Ph.D., assistant professor of human genetics and assistant research professor of bioinformatics at the Center for Computational Medicine and Biology at the U-M Medical School and assistant research professor at the U-M Life Sciences Institute.

"If there were a large number of migrations, and most of the source groups didn't have the variant, then we would not see the widespread presence of the mutation in the Americas," he says.
Rosenberg has previously studied the same set of 678 genetic markers used in the new study in 50 populations around the world, to learn which populations are genetically similar and what migration patterns might explain the similarities. For North and South America, the current research breaks new ground by looking at a large number of native populations using a large number of markers.

The pattern the research uncovered -- that as the founding populations moved south from the Bering Strait, genetic diversity declined -- is what one would expect when migration is relatively recent, says Mattias Jakobsson, Ph.D., co-first author of the paper and a post-doctoral fellow in human genetics at the U-M Medical School and the U-M Center for Computational Medicine and Biology. There has not been time yet for mutations that typically occur over longer periods to diversify the gene pool.

In addition, the study's findings hint at supporting evidence for scholars who believe early inhabitants followed the coasts to spread south into South America, rather than moving in waves across the interior. "Assuming a migration route along the coast provides a slightly better fit with the pattern we see in genetic diversity," Rosenberg says.

The study also found that:

- Populations in the Andes and Central America showed genetic similarities.
- Populations from western South America showed more genetic variation than populations from eastern South America.
- Among closely related populations, the ones more similar linguistically were also more similar genetically.

Citation: PLoS Genet 3(11): e185. doi:10.1371/journal.pgen.0030185
In addition to Rosenberg and Jakobsson, study authors include Cecil M. Lewis, Jr., former post-doctoral fellow in the U-M Department of Human Genetics, and 24 researchers at U.S., Canadian, British, Central and South American universities.

Europe's First Farmers Were Immigrants: They Replaced Their Stone Age Hunter-Gatherer Forerunners

ScienceDaily (Sep. 4, 2009) — Analysis of ancient DNA from skeletons suggests that Europe's first farmers were not the descendants of the people who settled the area after the retreat of the ice sheets. Instead, the early farmers probably migrated into major areas of central and eastern Europe about 7,500 years ago, bringing domesticated plants and animals with them, says Barbara Bramanti from Mainz University in Germany and colleagues.

The researchers analyzed DNA from hunter-gatherer and early farmer burials, and compared those to each other and to the DNA of modern Europeans. They conclude that there is little evidence of a direct genetic link between the hunter-gatherers and the early farmers, and 82 percent of the types of mtDNA found in the hunter-gatherers are relatively rare in central Europeans today.

For more than a century archaeologists, anthropologists, linguists, and more recently, geneticists, have argued about who the ancestors of Europeans living today were. We know that people lived in Europe before and after the last big ice age and managed to survive by hunting and gathering. We also know that farming spread into Europe from the Near East over the last 9,000 years, thereby increasing the amount of food that can be produced by as much as 100-fold. But the extent to which modern Europeans are descended from either of those two groups has eluded scientists despite many attempts to answer this question.

Now, a team from Mainz University in Germany, together with researchers from UCL (University College London) and Cambridge, have found that the first farmers in central and northern Europe could not have been the descendents of the hunter-gatherers that came before them. But what is even more surprising, they also found that modern Europeans couldn't solely be the descendents of either the hunter-gatherer alone, or the first farmers alone, and are unlikely to be a mixture of just those two groups.

"This is really odd", said Professor Mark Thomas, a population geneticist at UCL and co-author of the study. "For more than a century the debate has centered around how much we are the descendents of European hunter-gatherers and how much we are the descendents of Europe's early farmers. For the first time we are now able to directly compare the genes of these Stone Age Europeans, and what we find is that some DNA types just aren't there - despite being common in Europeans today."

Humans arrived in Europe 45,000 years ago and replaced the Neandertals. From that period on, European hunter-gatherers experienced lots of climatic changes, including the last Ice Age. After the end of the Ice Age, some 11,000 years ago, the hunter-gatherer lifestyle survived for a couple of thousand years but was then gradually replaced by agriculture. The question was whether this change in lifestyle from hunter-gatherer to farmer was brought to Europe by new people, or whether only the idea of farming spread. The new results from the Mainz-led team seems to solve much of this long standing debate.

"Our analysis shows that there is no direct continuity between hunter-gatherers and farmers in Central Europe," says Prof Joachim Burger. "As the hunter-gatherers were there first, the farmers must have immigrated into the area."

The study identifies the Carpathian Basin as the origin for early Central European farmers. "It seems that farmers of the Linearbandkeramik culture immigrated from what is modern day Hungary around 7,500 years ago into Central Europe, initially without mixing with local hunter gatherers," says Barbara Bramanti, first author of the study. "This is surprising, because there were cultural contacts between the locals and the immigrants, but, it appears, no genetic exchange of women."

The new study confirms what Joachim Burger´s team showed in 2005; that the first farmers were not the direct ancestors of modern European. Burger says "We are still searching for those remaining components of modern European ancestry. European hunter-gatherers and early farmers alone are not enough. But new ancient DNA data from later periods in European prehistory may shed also light on this in the future."

Ice Sheet Melt Identified as Trigger of 'Big Freeze'

ScienceDaily (Mar. 31, 2010) — The main cause of a rapid global cooling period, known as the Big Freeze or Younger Dryas -- which occurred nearly 13,000 years ago -- has been identified thanks to the help of an academic at the University of Sheffield.

A new paper, which is published in *Nature* on April 1, 2010, has identified a mega-flood path across North America which channelled melt-water from a giant ice sheet into the oceans and triggering the Younger Dryas cold snap.

The research team, which included Dr Mark Bateman from the University of Sheffield's Department of Geography, discovered that a mega-flood, caused by the melting of the Laurentide ice sheet, which covered much of North America, was routed up into Canada and into the Arctic Ocean.

This resulted in huge amounts of fresh water mixing with the salt water of the Arctic Ocean. As a result, more sea-ice was created which flowed into the North Atlantic, causing the northward continuation of the Gulf Stream to shut down.

Without the heat being brought across the Atlantic by the Gulf Stream, temperatures in Europe plunged from similar to what they are today, back to glacial temperatures with average winter temperatures of -25oC. This cooling event has become known as the Younger Dryas period with cold conditions lasting about 1400 years. The cold of the Younger Dryas affected many places across the continent, including Yorkshire in the Vale of York and North Lincolnshire which became arctic deserts with sand dunes and no vegetation.

Before now, scientists have speculated that the mega-flood was the main cause of the abrupt cooling period, but the path of the flood waters has long been debated and no convincing evidence had been found establishing a route from the ice-sheet to the North Atlantic.

The research team studied a large number of cliff sections along the Mackenzie Delta and examined the sediments within them. They found that many of the cliff sections showed evidence of sediment erosion. This evidence spanned over a large region at many altitudes, which could only be explained by a mega-flood from the over-spilling of Lake Agassiz, which was at times bigger than the UK, at the front of the Laurentide Ice-sheet rather than a normal flood of the river.

Dr Bateman, who has been researching past environmental changes both in the UK and elsewhere in the world for almost 20 years, runs the luminescence dating lab at Sheffield. The lab was able to take the MacKenzie Delta sediment samples from above and below the mega-flood deposits, and find out when the mega-flood occurred, enabling its occurrence to be attributed to the start of the Younger Dryas.

The study will help shed light on the implications of fresh water input into the North Atlantic today. There are current concerns that changes in the salinity of the ocean today, could cause another shut down of the Gulf Stream. Current climate changes, including global warming, may be altering the planetary system which regulates evaporation and precipitation, and moves fresh water around the globe.

The findings, which show the cause, location, timing and magnitude of the mega-flood, will enable scientists to better understand how sensitive both oceans and climates are to fresh-water inputs and the potential climate changes which may ensue if the North Atlantic continues to alter.

Dr Mark Bateman, from the University of Sheffield's Centre for International Drylands Research at the Department of Geography, said: "The findings of this paper through the combination of luminescence dating, landscape elevation models and sedimentary evidence allows an insight into what must have been one of the most catastrophic geological events in recent earth's history. They also show how events within the Earth-climate system in North America had huge impacts in Europe."

Ice Age Climate Change Did Not Pose Significant Challenges to First Americans, Study Suggests

ScienceDaily (Apr. 14, 2010) — Paleoindian groups -- the first people to enter and subsequently inhabit the American continent during the final glacial episodes of the Pleistocene period -- occupied North America throughout the Younger Dryas interval, which saw a rapid return to glacial conditions approximately 11,000 years ago. Until now, it has been assumed that cooling temperatures and their impact on communities posed significant adaptive challenges to those groups.

David Meltzer from the Southern Methodist University in Dallas, USA, and Vance Holliday from the University of Arizona in Tucson, USA, suggest otherwise in their review of climatic and environmental records from this time period in continental North America, published in Springer's Journal of World Prehistory.

From their analysis, they conclude that on the Great Plains and in the Rocky Mountains, conditions were in reality less extreme and therefore may not have measurably added to the challenge routinely faced by Paleoindian groups, who during this interval, successfully dispersed across the diverse habitats of Late Glacial North America.

Meltzer and Holliday question whether the impact of cooling on Pleistocene North Americans was actually that pronounced or widespread and, if it was, whether it was similarly abrupt and severe, and in the same direction, across North America. Their comprehensive review of the climate and environment of North America during that time and its possible impact suggests that the Young Dryas age cooling was not as sudden, extensive, or severe as has previously been suggested and the notion that these conditions may have taken the Paleoindians by surprise is questionable.

The authors conclude: "All things considered, it is likely that across most of North America, south of the retreating ice sheets, Paleoindians were not constantly scrambling to keep up with Younger Dryas age climate changes. After all, adapting to changing climatic and environmental conditions was nothing new to them -- it was what they did."

North America's First Peoples More Genetically Diverse Than Thought, Mitochondrial Genome Analysis Reveals

ScienceDaily (June 29, 2010) — The initial peopling of North America from Asia occurred approximately 15,000-18,000 years ago. However, estimations of the genetic diversity of the first settlers have remained inaccurate. In a report published online in *Genome Research*, researchers have found that the diversity of the first Americans has been significantly underestimated, underscoring the importance of comprehensive sampling for accurate analysis of human migrations.

Substantial evidence suggests that humans first crossed into North America from Asia over a land bridge called Beringia, connecting eastern Siberia and Alaska. Genetic studies have shed light on the initial lineages that entered North America, distinguishing the earliest Native American groups from those that arrived later. However, a clear picture of the number of initial migratory events and routes has been elusive due to incomplete analysis.

In this work, an international group of researchers coordinated by Antonio Torroni of the University of Pavia in Italy performed a detailed mitochondrial genome analysis of a poorly characterized lineage known as C1d. Mitochondrial DNA (mtDNA) is passed down through the maternal lineage, and mtDNA sequence markers are extremely useful tools for mapping ancestry. Similar to other haplogroups that were among the first to arrive in North America, C1d is distributed throughout the continent, suggesting that it may have been also present in the initial founding populations. However, C1d has not been well represented in previous genetic analyses, and the estimated age of approximately 7,000 years, much younger than the other founding haplogroups, was likely inaccurate.

To resolve these inconsistent lines of evidence, the group sequenced and analyzed 63 C1d mtDNA genomes from throughout the Americas. This high-resolution study not only confirmed that C1d was one of the founding lineages in North America 15,000 to 18,000 years ago, but revealed another critical insight. "These first female American founders carried not one but two different C1d genomes," said Ugo Perego of the Sorenson Molecular Genealogy Foundation and primary author of the study, "thus further increasing the number of recognized maternal lineages from Beringia."

These findings raise the number of founding maternal lineages in North America to fifteen. Furthermore, this work emphasizes the critical need for comprehensive analysis of relevant populations to gather a complete picture of migratory events.

Alessandro Achilli of the University of Perugia, a coauthor of the report, suggests that the number of distinct mitochondrial genomes that passed from Asian into North America is probably much higher. "These yet undiscovered maternal lineages will be identified within the next three to four years," Achilli noted, "when the methodological approach that we used in our study will be systematically applied."

Scientists from the Sorenson Molecular Genealogy Foundation (Salt Lake City, UT), the University of Pavia (Pavia, Italy), the University of Perugia (Perugia, Italy), the University of Santiago de Compostela, (Santiago de Compostela, Spain), Innsbruck Medical University (Innsbruck, Austria), and the University of Beunos Aries (Buenos Aires, Argentina).

This work was supported by the Sorenson Molecular Genealogy Foundation, Ministerio de Ciencia e Innovación, Fundación de Investigación Médica Mutua Madrileña, the FWF Austrian Science Fund, Progetti Ricerca Interesse Nazionale (Italian Ministry of the University), and Fondazione Alma Mater Ticinensis.

Minutes – IPCAS Executive Board Meeting
October 7, 2010 – 7:00PM – 8:30PM

Location: Basil Flats restaurant on South Hover Road across from the Twin Peaks Mall, Longmont
Executive Board Member Attendees: Carolyn Camell-Coppin, Cheryl Damon, Dave Hawley, Kris Holien, Anne Robinson, Joanne Turner
Secretary's Report (Hawley): The September 2010 Minutes were approved.
Treasurer's Report (Camell-Coppin):

Bal as of 8/31/10	Bal as of 9/30/10*	New Members	Renewals
$2,864.14	$2,501.14	1	1

* Expenditures included $480 for 8 months rent (CU Museum meeting location Sep thru Nov 2010 and Jan thru May 2011), donation of the honorarium from the September meeting (per presenter desire) to the Boulder Mountain Fire Relief Fund, and receipts from 2 new members and PAAC class participants.
Speaker Scorecard (Robinson)

- 10/14/10 – IPCAS presentation meeting – Alice Tratebas, Newcastle, WY BLM, on *Whoop-Up Canyon – Dating, Fire Damage, and Finished Photogrammetry*.
- Board members still working on filling the presenter slots for Nov10 and January thru May 2011.

Old Business

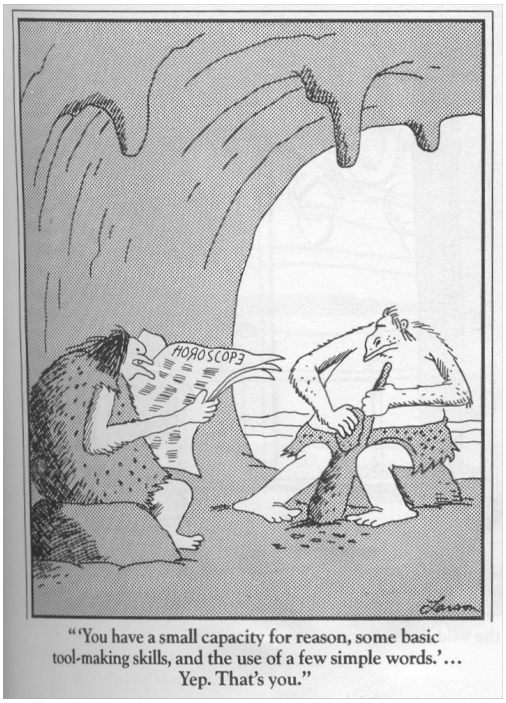
- Membership & Leadership: We need to continue to focus on increasing our membership, especially members who are willing to roll up their sleeves and help lead. We critically need (a) a new Webmaster to replace Tom Cree to lead the migration of our website to the State-run website, (b) a new *Calumet* Editor to replace Tom Cree, and (c) a Secretary to replace Dave Hawley. For 2011, (1) Anne has agreed to continue as President, (2) Karen Kinnear has agreed to continue as Vice President, (3) Carolyn has agreed to continue as Treasurer, and (4) Cheryl Damon, Kris Holien, and Joanne Turner have agreed to continue as members of the Board. Dave has agreed to continue as PAAC Coordinator unless another member would like to assume this position. Still open are the Outreach Coordinator and CAS Representative positions.
- Fall PAAC Class: Dave reported that it looks like we have 19 signed up, but 4 checks must still be received. Course starts on 10/20/10.

- Site Stewardship Program: Anne shared that she was in contact with Paul Alford (South Zone Archeologist of Arapaho/Roosevelt NF), and that she will again consult with Paul in mid-October about re-starting this program.
- Event Calendar: Anne is working on this initiative (on-line Google calendar).
- Winter Field Trip: Anne shared that she is working with a CU Museum person on scheduling a trip.
- October Lecture Location – Getting People There: It was noted that the CU Museum parking lot is now totally unusable, and is likely to be so until November 13, so an email will go out before next week's meeting asking members to plan ahead to locate suitable parking on their own and still be on time to the meeting. A cell phone # will be published to facilitate latecomers in getting into the Museum Collection building for the meeting.
- Book Topic / Book Club – Anne shared that she has booked a room in the Boulder Main Library on Thursday evening, 01/27/11 – starting 7pm – details to be announced via email and *Calumet*.
- Annual Meeting Planning: Discussion was tabled pending availability of Karen to lead the planning effort based on her research during the recent Annual Meeting held in Gunnison .

New Business

- General IPCAS Email Address: It was agreed that we need such an email address established in concert with the migration of our website to the State-run CAS website.
- Holiday Party: The date of 12/9/10 was agreed, starting time 6pm for a potluck. Joanne will check on the availability of St. Andrews Church (location where party has been held in the past) on that date. Fail availability of that venue, Joanne will investigate the Niwot Grange and other possible venues.
- June 2011 Picnic: The date of 6/9/11 was agreed, starting time 5:30pm for a potluck. Anne will attempt to lock in a picnic location at Betasso Preserve on this date. Anne also suggested that we attempt to have atlatl throwing during this picnic, perhaps inviting a Ft. Collins group to demonstrate and assist with equipment.
- Position Description for Outreach Coordinator: Anne will contact the Ft. Collins Chapter/Club to see if they have developed a position description for their Outreach Coordinator, which could become a starting point for IPCAS in searching for a person to fill this IPCAS position.
- Boulder *Daily Camera* Non-Profit Article: It was agreed that before we provide input for such an article, our schedule needs to be robust, and our website already migrated to the State-run CAS website.

The location of the next Board meeting, scheduled for 11/4/10, will again be the Basil Flats restaurant on South Hover Road in Longmont (across from Twin Peaks Mall) at 7:00PM. Members are welcome to attend.



"'You have a small capacity for reason, some basic tool-making skills, and the use of a few simple words.'… Yep. That's you."

2010 IPCAS Officers, Board Members, and major functions

President	Anne Robinson	(720) 890-3944	annerco@yahoo.com
Vice-President	Karen Kinnear	(303) 516-9260	kinnearkaren@hotmail.com
Treasurer	Carolyn Camell-Coppin	(303) 775-9206	cacc.co@live.com
Secretary	Dave Hawley	(303) 443-2332	dave_hawley@comcast.net
Outreach Coordinator	Chris Strachan	(303) 485-5415	sduffy294@comcast.net
Professional Advisor	Dr. Robert Brunswig	(970) 351-2138	robert.brunswig@unco.edu
PAAC Coordinator	Dave Hawley	(303) 443-2332	dave_hawley@comcast.net
CAS Representative			
Internet Manager	Cyndi Cree	(310) 663-0656	c_cree@hotmail.com
Archivist/Librarian	Kris Holien	(970) 586-8982	kjholien@aol.com
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Board Member	Cheryl Damon	(303) 678-8076	cheryl_damon@msn.com
Board Member	Kris Holien	(970) 586-8982	kjholien@aol.com
Board Member	Joanne Turner	(303) 494-7638	joanne.turner@colorado.edu

MEMBERSHIP APPLICATION - INDIAN PEAKS CHAPTER

Quarterly new member enrollment	Individual	Family	Student
January-March	$28.50	$33.00	$14.25
April-June	$21.50	$24.75	$10.75
July-September	$14.25	$16.50	$7.25
October-December	$7.25	$8.25	$3.75

____ New ____ Renewal Tax-Exempt Donation __ $10, __ $25, __ $50, Other _____

NAME _____ **TELEPHONE** (____)_____

ADDRESS _____ **E-MAIL** _____

CITY _____ **STATE** _____ **ZIP**_____

Please make check payable to: Indian Peaks Chapter, CAS. Mail to: PO Box 18301, Boulder, Colorado 80308-1301

I(We) give CAS permission to :

Yes ____ No ____ disclose phone numbers to other CAS members

Yes ____ No ____ publish name/contact information in chapter directory

Yes ____ No ____ publish name in newsletter (which may be sent to other chapters, published on the internet, etc.)

CODE OF ETHICS

As a member of the Colorado Archaeological Society, I pledge: To uphold state and federal antiquities laws. To support policies and educational programs designed to protect our cultural heritage and our state's antiquities. To encourage protection and discourage exploitation of archaeological resources. To encourage the study and recording of Colorado's archaeology and cultural history. To take an active part by participating in field and laboratory work for the purpose of developing new and significant information about the past. To respect the property rights of landowners. To assist whenever possible in locating, mapping and recording archaeological sites within Colorado, using State Site Survey forms. To respect the dignity of peoples whose cultural histories and spiritual practices are the subject of any investigation. To support only scientifically conducted activities and never participate in conduct involving dishonesty, deceit or misrepresentation about archaeological matters. To report vandalism. To remember that cultural resources are non-renewable and do not belong to you or me, but are ours to respect, to study and to enjoy.

Signature: _____ Signature: _____

CALUMET

Newsletter of the Indian Peaks Chapter of the Colorado Archaeological Society

P.O. Box 18301

Boulder, CO 80308-1301