

LAS July 2014 Headlines:

Ancient skeleton of teenage girl sheds new light on first Americans

Associated Press, May 15, 2014

NEW YORK – Thousands of years ago, a teenage girl toppled into a deep hole in a Mexican cave and died. Now, her skeleton and her DNA are bolstering the long-held theory that humans arrived in the Americas by way of a land bridge from Asia, scientists say.

The girl's nearly complete skeleton was discovered by chance in 2007 by expert divers who were mapping water-filled caves north of the city of Tulum, in the eastern part of the Yucatan Peninsula. One day, they came across a huge chamber deep underground.

"The moment we entered inside, we knew it was an incredible place," one of the divers, Alberto Nava, told reporters. "The floor disappeared under us and we could not see across to the other side."

They named it Hoyo Negro, or black hole.

Months later, they returned and reached the floor of the 100-foot tall chamber, which was littered with animal bones. They came across the girl's skull on a ledge, lying upside down "with a perfect set of teeth and dark eye sockets looking back at us," Nava said.

The divers named the skeleton Naia, after a water nymph of Greek mythology, and joined up with a team of scientists to research the find.

The girl was 15 or 16 when she met her fate in a cave, which at that time was dry, researchers said. She may have been looking for water when she tumbled into the chamber some 12,000 or 13,000 years ago, said lead study author James Chatters of Applied Paleoscience, a consulting firm in Bothell, Washington. Her pelvis was broken, suggesting she had fallen a long distance, he said.

The analysis of her remains, reported Thursday in the journal *Science* by researchers from the United States, Canada, Mexico and Denmark, addresses a puzzle about the settling of the Americas.

Most scientists say the first Americans came from Siberian ancestors who lived on an ancient land bridge, now submerged, that connected Asia to Alaska across the Bering Strait. They are thought to have entered the Americas sometime after 17,000 years ago from that land mass, called Beringia. And genetic evidence indicates that today's native peoples of the Americas are related to these pioneers.

But the oldest skeletons from the Americas -- including Naia's -- have skulls that look much different from those of today's native peoples. To some researchers, that suggests the first Americans came from a different place.

Naia provides a crucial link. DNA recovered from a molar contains a distinctive marker found in today's native peoples, especially those in Chile and Argentina. The genetic signature is thought to have arisen among people living in Beringia, researchers said.



Diver Susan Bird, working at the bottom of Hoyo Negro, a large dome-shaped underwater cave in Mexico's Yucatan Peninsula, brushes a human skull found at the site while her team members take detailed photographs.AP



That suggests that the early Americans and contemporary native populations both came from the same ancestral roots in Beringia -- not different places, the researchers concluded. The anatomical differences apparently reflect evolution over time in Beringia or the Americas, they said.

The finding does not rule out the idea that some ancient settlers came from another place, noted Deborah Bolnick, a study author from the University of Texas at Austin.

Dennis O'Rourke, an expert in ancient DNA at the University of Utah who didn't participate in the work, said the finding is the first to show a genetic link to Beringia in an individual who clearly had the anatomical signs of a very early American. He said he considered the notion of multiple migrations from different places to be "quite unlikely."

Last February, other researchers reported that DNA from a baby buried in Montana more than 12,000 years ago showed a close genetic relationship to modern-day native peoples, especially those in Central and South America. An author of that study, Mike Waters of Texas A&M University, said the Mexican finding fits with the one in Montana.

There are so few such early skeletons from the Americas, he said, that "every single one of them is important."

However, Richard Jantz, a retired professor of forensic anthropology at the University of Tennessee in Knoxville, said he still believes early settlers arrived by boat from east Asia before any migration occurred via Beringia. That's based on anatomical evidence, he said. The argument in the new paper "leaves a lot of unanswered questions," he said in an email.

Gomphotheres Added to Clovis Menu

Archaeology, Tuesday, July 15, 2014



(Vance Holliday)

TUCSON, ARIZONA—Clovis projectile points and cutting tools have been found mingled with the bones of two juvenile gomphotheres, elephant-like relatives of mastodons and mammoths, in northwestern Mexico. Gomphotheres are known to have been hunted in Central and South America, but this is the first time such evidence has been found in North America. "At first, just based on the size of the bone, we thought maybe it was a bison, because extinct bison were a little bigger than our modern bison. We finally found the mandible, and that's what told the tale," Vance Holliday of the University of Arizona told *Science Daily*. The bones have been dated to 13,400 years ago, making them the last known gomphotheres in North America.



Lindenmeier: Ancient Lives, Ancient Dreams

Lindenmeier: Ancient Lives, Ancient Dreams is a symposium celebrating the Lindenmeier archeological site at Soapstone Prairie Natural Area, the largest Paleoindian site in North America. This year marks the 80th anniversary of the Smithsonian Institution's visit to the National Historic Landmark. Scientists discovered a Folsom point wedged into an ancient bison bone at Lindenmeier, helping to prove the presence of humans at the location at least 10,000 years ago. The symposium, featuring Edwin N. Wilmsen as the keynote speaker (co-author with Frank H.H. Roberts of *Lindenmeier: Concluding Report of Investigations*), will be October 19-22. Registration and details are at fcmmod.org.

Details & Schedule

Sunday, October 19- Wednesday, October 22, 2014

Invited speakers include:

- Dr. Edwin N. Wilmsen, keynote speaker
- Dr. Jason LaBelle, about current research onsite
- Dr. David Meltzer, about Folsom Paleoindians
- Dr. Steven Holen, about the peopling of North America
- Dr. Frederic Sellet, about the Smithsonian Lindenmeier collections
- Nicole Waguespack, about Colorado Folsom-era Paleoindians at Barger Gulch
- Experts on the Denver Museum of Nature and Science collections
- Local historians



The symposium is a once in a lifetime opportunity and includes presentations and panel discussions at Fort Collins' Northside Aztlan Center, a reception at the Fort Collins Museum of Discovery including a behind the scenes tour, a banquet at Rio Grande restaurant, and a field trip to the Lindenmeier site at Soapstone Prairie Natural Area. Registration is \$150 until July 1, then registration will be \$175, at fcmmod.org. Register now as registration is limited to 200 people! Don't miss this amazing opportunity. Sponsored by Fort Collins Museum of Discovery and City of Fort Collins Natural Areas Department.

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Loveland Archaeological Society, Inc.

A Colorado Non-Profit Corporation

LAS Find of the Month, July 2014:

Members can bring an artifact to be entered into the competition at the monthly meeting, which will be judged based on the following rules:

1. Must be a member of LAS in good standing.
2. The artifact must be a personal find.
3. It must have been found within the specified time frame, i.e., within the month prior to the meeting.
4. The artifact doesn't have to be a Colorado find—all that matters is that it was found in the last month.

The Find of the Month for July 2014 was made by Robin Guthrie

Type: Hannah

Material: Petrified Wood

Location: Weld County



LAS News and Upcoming Events:

- Speakers Needed!** We need speakers for our 2014 meetings. If you would like to give a presentation or know of someone who would give a great program please contact Andy Coca, Jean Steinhoff or Kevin Zeeck. No experience is necessary. All that is needed is a passion for our hobby and a willingness to share that passion. Thanks!
- July – August 2014** Hell Gap site excavation. Dr. Marcel Kornfeld has extended an invitation to all LAS members to come by and visit the site, or even volunteer to help with the dig. If you are interested see the website at <http://www.uwyo.edu/pirl/summer%20schedule.html>.
- August 5, 2014** August meeting. Program: Annual picnic/potluck. Sharon Lundt's home suffered severe flood damage recently, so we will be in the Pulliam for the potluck this year.
- August 30 - September 1, 2014** Loveland Archaeological Society Labor Day Weekend field trip to the Harris Ranch at Bosler, Wyoming. A map and instructions will be included in the August newsletter.
- September 2, 2014** September meeting. Program: to be announced.
- September 27 & 28, 2014** 2014 Loveland Stone Age Fair. If you have any questions you may phone Kevin Zeeck at 303-682-0471 after 6:30 PM, MDT (kevin.zeeck@gmail.com). As a reminder, there is no buying, selling, or trading of authentic artifacts, and no soliciting to buy, sell, or trade. Plan now to attend!