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Fire archeologists go to blazes to find sites

By Jim Carlton

Condensed from the Wall Street Journal, July 29, 2016

SEQUOIA NATIONAL FOREST, Calif. — Wildfires scorching the West are revealing an unexpected bounty: newly uncovered historic artifacts, some dating back thousands of years.

Looters and government archeologists are scouring charred earth for the new archeological treasures — sometimes even before all the embers are out.

Last summer, a fire that blackened about 150,000 acres in the mountains here above Fresno, Calif., uncovered remnants of a 19th-Century logging railroad and camp that had been partially hidden by vegetation.

"Camp dumps are cool because you can see what people were eating and drinking," said Alex Verdugo of the U.S. Forest Service, as he recently picked through debris he estimates was discarded as long as 100 years ago.

As fire archeologists usually do, Verdugo put the items back where he found them. At this spot deep in the forest, several items were covered in camouflage material to help keep them hidden from looters.

Verdugo is one of a growing number of fire archeologists deployed by state and federal agencies to try to safeguard cultural artifacts, before and after a wildfire. Verdugo's team, for example, helped keep a trestle from being consumed by last summer's Rough Fire outside Fresno. They wrapped the object, made of ancient giant sequoias, in fire-resistant aluminum foil before flames arrived.

Trained in firefighting, the archeologists first started going out with crews in the 1970s but over the past 15 years or so have been embedding with them more as the number of fires has increased, said Linn Gassaway, heritage program manager for California's Lassen National Forest.

About 70 million acres burned in the U.S. over the past decade, up from 55 million in the prior ten years and 30 million between 1986 and 1995, according to the National Interagency Fire Center in Boise, Idaho.

Even with as many as 200 fire archeologists in the field across Western states, she said they are able to protect only a fraction of the historic sites threatened by fire.

Even so, the archeologists have made some impressive discoveries. In a 2006 fire in Riverside County, Calif., Gerrit Fenenga said he discovered the remains of a prehistoric rock shelter that served as a container for sacred items of the Cahuilla tribe.

On one fire she worked on in New Mexico, Gassaway said, the removal of vegetation exposed 1,000-year-old Native American ruins including caves, staircases and a ceremonial dance floor. "Almost every fire uncovers some large site we never knew about before," Gassaway said.

The fires also open up larger parts of known archeological areas. After officials in Yosemite National Park set a 100-acre fire on the valley floor last October to reduce a buildup of vegetation, fire archeologist Jun Kinoshita said he discovered that a roughly 800-year-old Native American site was some 30 feet wider in two

Continued on Page 8

Upcoming events

September 10: ASM board meeting. Heritage House, Ellicott City. 10 a.m. All members welcome.

September 17: Symposium, "Divine Kingship: The political ideology of pre-Columbian Rulers." The Pre-Columbian Society of Washington, D.C. Naval Memorial and Heritage Center. 9 to 5:30. Registration at **www.pcswdc.org**

October 15: International Archeology Day. www.archaeologyday.org

October 22: ASM Annual Meeting. Catoctin Furnace Historic District, Frederick County.

Volunteer opportunities

The following volunteer opportunities are open to CAT participants and other ASM members:

ASM Tuesday Volunteer Lab: The lab in Crownsville is open Tuesdays from 9:30 until 3 and is now cataloging Mason Island II (18MO13) material. Anyone interested (especially CAT candidates) is welcome. Contact Louis Akerson at lakerson1@verizon.net or Charlie Hall at charles.hall@maryland.gov

A volunteer opportunity is available at a 17 Century site in Edgewater in Anne Arundel County, on Mondays, Tuesdays and Fridays, with Jim Gibb jamesggibb@verizon.net and Laura Cripps lcripps@howardcc.edu under the auspices of the Smithsonian. Contact either one to participate. There will be magnetometer training.

The Smithsonian Environmental Research Center seeks participants in its Citizen-Scientist Program in archeology and other environmental research programs in Edgewater. Field and lab work are conducted Wednesdays and on occasional Saturdays. Contact Jim Gibb at jamesggibb@verizon.net

Montgomery County is accepting applications from for lab and field work volunteers for work beginning in September. Contact Heather Bouslag at 301 563 7530 or Heather.Bouslog@montgomeryparks.org

The Anne Arundel County Archaeology Program and the Lost Towns Project welcome volunteers in both field and lab at numerous sites throughout Anne Arundel County. Weekdays only. Email Jasmine Gollup at volunteers@losttownsproject.org or call the lab at 410 222 1318.

Mount Calvert. Lab work and field work. 301 627 1286.

Jefferson Patterson Park invites volunteers to take part in its activities, including archeology, historical research and conservation. Contact Ed Chaney at ed.chaney@maryland.gov or 410 586 8554.

The Archaeological Institute of America provides an online listing of fieldwork opportunities worldwide. Call up www.archaeological.org/fieldwork to get started.

CAT corner:

Jim Gibb will offer two workshops on September 17. The morning sessions, 10 a.m. to noon, will be on ethics, the afternoon, 1:30 to 3:30, on preservation law. Bring your own lunch. The workshops will be at the Smithsonian Environmental Research Center in Edgewater. A tour of SERC is available during the lunch break. RSVP required September 10 at: http://burquiza@comcast.net or 410-535-2586.

Lenape tribe gains recognition in Delaware

By Matt Bittle

Condensed from the Delaware State News, August 4, 2016

DOVER — For the first time, the Lenape Indian tribe was officially recognized by the state of Delaware Thursday.

"I'm just very happy," Principal Chief Dennis J. Coker said. "This is a major, major milestone for us as a community, so our people can stand up and be very proud of who they are and their ancestry and not have to worry about the naysayers who may argue otherwise."

The proposal that provided recognition, House Bill 345, may have passed unanimously, but it was the culmination of years of work.

The Lenape sought to have legislation passed in 1993 but were unsuccessful, Chief Coker said. After that effort failed, members of the tribe decided additional work was needed.

"I started to do a lot of collaboration with state agencies and the federal government and federal agencies because, as I mentioned earlier, we've always had an acknowledgment. So there was the idea that we did exist," Chief Coker said. "Now, formal recognition was — they were a little bit apprehensive because there are those that thought that state recognition would lead us to a casino, and that is absolutely not the case."

The state now will have two officially recognized tribes: the Lenape and the Nanticoke. A companion piece of legislation passed this year gives the status to the Nanticoke retroactive to 1881.

"This is a historic event," main bill sponsor Rep. Sean Lynn, D-Dover, said. "This is something that many people in this room have worked for and worked on for literally generations."

The Lenape people can trace lineage back 300 years and have been living around Cheswold for at least that long. About 850 people identified themselves as Lenape in a 2010 survey, although Chief Coker said he believes there are more. Members have also intermarried with the Nanticoke Lenni-Lenape Indian tribe in Bridgeton, New Jersey, and share many traits with the Nanticoke in Sussex County.

'Helpful' kids ruin 5,000−year−old rock carving

By Elise Schmelzer

Condensed from the Washington Post, August 2, 2016

For 5,000 years, one of the world's earliest carvings depicting skiing endured rain, wind and snow on the coast of a Norwegian island. But it took only minutes for two children to destroy the historic landmark Friday in a mishap that locals are calling a "tragic incident."

They thought the etching had become too faded, so they decided to scratch over it to make it easier to see.

"It was done out of good intentions," said Tor-Kristian Storvik, county archeologist "They were trying to make it more visible actually, and I don't think they understood how serious it was."

The kids apologized for the vandalism after it was reported. They could face criminal charges under the country's Cultural Heritage Act, which protects archeological and cultural sites.

The carving on the northern island of Tro is one of the country's most famous historic sites and an important clue as to when people began skiing.

The damage to the carving is most likely irreversible, Bård Anders Langø, mayor of a nearby town, told Norwegian paper the Local.

Although children can be told to look and not touch, keeping them from destroying valuable art across the globe has proven easier said than done.

In August 2015, a Taiwanese boy tripped into a $1.5 million painting, leaving a fist-sized hole. Even more cringe-worthy is a video of two small children gleefully destroying a work of art in the Shanghai Museum of Glass in May. Nearby, their parents recorded the chaos on their phones.

Old land−bridge story takes another hit

By Sarah Kaplan

Condensed from the Washington Post, August 15, 2016

At long last, the Ice Age is almost over. The vast glaciers that have formed an impenetrable barrier across the top of North America are finally beginning to recede. Between the two walls of ice, a corridor emerges. The descendants of Asians who daringly crossed an ice bridge into the unknown get the opportunity they've been waiting for: Finally, a pathway south.

When they emerge on the other side, many decades and 1,000 miles later, they are in what is now Montana – the first human inhabitants of what is truly a new world. Unless you closely follow the latest findings in American paleoarcheology, this is probably the version of America's origin story you're accustomed to. But it's almost certainly wrong.

A growing body of evidence suggests that people had colonized the Americas several thousand years before the end of the last Ice Age — long before the corridor between the glaciers was even open.

"The school book story that most of us are used to doesn't seem to be supported," said Eske Willerslev, an evolutionary geneticist at the University of Copenhagen's Center for Geogenetics and a co-author of a new study on the history of that legendary ice-free corridor.

Writing in the journal Nature on Wednesday, Willerslev and his colleagues reconstruct what the corridor would have been like 13,000 years ago, when geologic records indicate it first opened up. In rock cores taken from the bottoms of former lakes, they find evidence of a rocky, barren place that no prehistoric human would have ventured into for several hundred years.

If and when people finally did migrate through the corridor, the scientists say, it seems likely that they traveled south to north as well as north to south — adding to the evidence that humans were already in the lower 48 when the path through Canada emerged from the ice.

Twenty years ago, this finding would have been deemed outlandish. For most of the 20th Century, it was archeological orthodoxy that a society known as Clovis was the first to colonize the Americas 13,000 years ago.

But in the late 1990s, a group of prominent archeologists examined a hunk of mastodon meat and the remains of huts uncovered at Monte Verde in southern Chile. They concluded the site had been established by people who predated Clovis by some 1,500 years.

Other discoveries of human activity — but so far, no actual human remains — at roughly a dozen sites scattered throughout two continents have bolstered support for a new model: The first Americans traveled along the Pacific coast by boat, hopping between intermittent ice-free beaches and living off the abundance of the sea until they finally reached the land beyond the glaciers.

If the very first Americans didn't come through the corridor, some wondered, perhaps the Clovis people took the route later. No such luck, according to Willerslev. "Even for Clovis people ... I find it very unlikely they could have come through the interior ice corridor," he said. "It simply wasn't viable."

Willerslev and his colleagues took core samples from nine former lake beds in British Columbia, where the vast Laurentide and Cordellian ice sheets parted. They used radiocarbon analysis to date each sediment layer, then tested for large fossils, pollen (evidence of trees) and DNA (evidence of, well, everything else).

Normally, it would be all but impossible to get coherent data from a random sediment sample — the strands of DNA are too jumbled and degraded to be isolated for sequencing. But the Nature team used a technique called "shotgun sequencing," which involves indiscriminately sequencing every bit of DNA in a clump of organic matter and matching the results to a database of known genomes to see signs of individual organisms emerge.

In the deepest layers, from 13,000 years ago, Mikkel Pedersen, at the Center for Geogenetics and his colleagues found almost no evidence of life. About 400 years above that, in the 12,600-year-old layer, they started seeing traces of bison, hare and sage brush. At this point, the corridor was likely lush enough to support human travelers, he said.

By 10,000 years ago, the corridor would close again — not because of ice, but because of trees. Canada was blanketed in the dense boreal forest we know today. This research doesn't put an end to the questions about human migration into the Americas — it just means scientists can focus on new ones.

Voter ID laws said to harm Indians

By Robert Barnes

Condensed from the Washington Post, August 1, 2016

A federal judge on Monday called North Dakota's strict voter-ID law unfair to Native Americans and blocked its use in the coming election, continuing a series of recent victories against restrictions imposed by state legislatures.

In recent days, judges have blocked or loosened voting restrictions in Texas, North Carolina, Wisconsin and Kansas. The fights have pitted Democrats and civil rights groups who say restrictive ID laws discriminate against minorities against Republican legislators, who say they enacted the laws to combat voter fraud and protect the public's confidence in elections.

U.S. District Judge Daniel L. Hovland said North Dakota for years had provided a safety net for those unable to provide the specific kinds of ID required and that eliminating it would mean eligible voters are disenfranchised.

Before 2013, the state allowed many forms of identification for use, and those without could sign affidavits to their identity. But the 2013 law allowed only four forms of ID: a North Dakota driver's license, a North Dakota non-driver's ID card, a tribal government-issued ID card or an alternative form of ID prescribed by the secretary of state. A provision added last year prohibited college IDs or military IDs to be used.

"Although the majority of voters in North Dakota either possess a qualifying voter ID or can easily obtain one, it is clear that a safety net is needed for those voters who simply cannot obtain a qualifying voter ID with reasonable effort," Hovland wrote.

"Voter fraud in North Dakota has been virtually non-existent," wrote Hovland, who was nominated by President George W. Bush. He said the state "produced no evidence suggesting the public's confidence in the electoral process would be undermined by excusing those voters who cannot reasonably obtain an ID."

The burdens fall particularly hard on the state's Native American population, Hovland said. He said the law's challengers "presented undisputed evidence that more than 3,800 Native Americans may likely be denied the right to vote in the upcoming general election in November 2016 absent injunctive relief."

The lawsuit was brought by several Native Americans, who presented evidence that the group is less likely to have driver's licenses, lack birth certificates that are required in some cases to get an ID and are uniquely unable to make use of alternatives such as providing two documents that show their residential addresses.

"One reason is that many Native Americans do not have residential addresses, and the Post Office delivers their mail to a post office box," the judge wrote.

In Wisconsin, two federal judges have attacked separate provisions of that state's law, and one questioned the legislature's motives. "The Wisconsin experience demonstrates that a preoccupation with mostly phantom election fraud leads to real incidents of disenfranchisement," wrote U.S. District Judge James D. Peterson. "To put it bluntly, Wisconsin's strict version of voter ID law is a cure worse than the disease."

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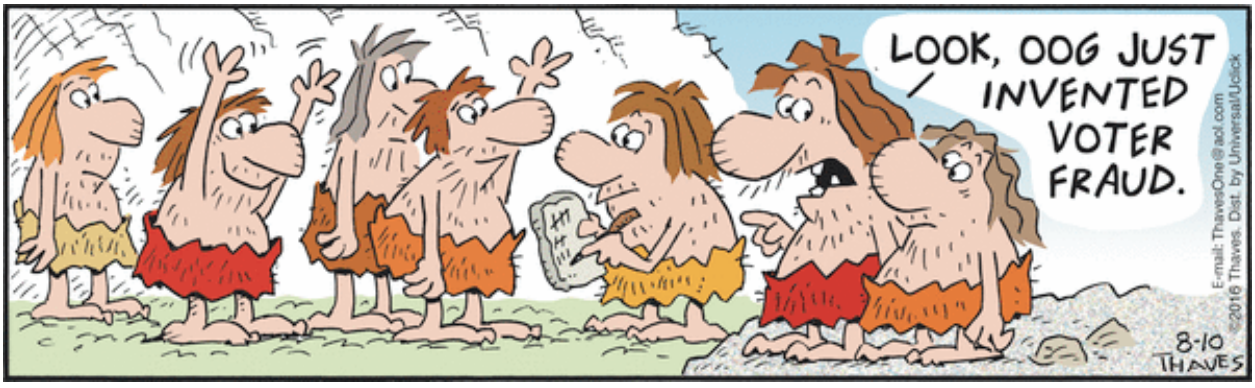

Searching for the missing slave artifact − ships

By Kevin Sieff

Condensed from the Washington Post, August 22, 2016

OFF THE COAST OF DAKAR, SENEGAL — The archeologist rose in the bow of the speedboat, pointing to the choppy waters where the 18th-Century slave ship had gone down.

Off the western tip of mainland Africa lie some of the most important vestiges of the transatlantic slave trade: the wreckage of ships that sank, carrying thousands of Africans to the Americas. But despite historians' immense interest in that period, no one has ever tried to excavate them. Until now.

For years, the wrecks were considered too hard to find. The work was too expensive. And few African researchers were willing to take on the project in countries where the slave trade is often considered a source of shame — not a subject worthy of study.

Ibrahima Thiaw, a tall 50-year-old archeologist from rural Senegal, is one of the pioneers trying to find the wrecks. There has been only one known excavation of a ship that went down off the African coast while carrying slaves — the São José, found off South Africa. Artifacts from the vessel will be displayed at the Smithsonian's National Museum of African American History and Culture, opening next month.

"The stories that will help us understand the slave trade, this crucial moment in human history, are down there," Thiaw said. But as he would discover over the following months, it wouldn't be easy.

Senegal was a major exporter of slaves for about 400 years. When Thiaw was in school, though, that history was barely discussed. As a boy, he visited Goree Island, just off the coast of Dakar, where a tour guide told him about the slaves waiting, shackled, for boats headed for the Americas.

It was the beginning of an obsession. After studying at the University of Dakar he earned a PhD at Rice University in Houston.

Senegal had became known worldwide for its landmarks of the slave trade, particularly on Gorée, a major entrepot, or trading center. But the scholarship turned out to be shaky. In the 1990s, American researchers claimed that those sites had been misidentified. The famed "Door of No Return" was not in fact a final departure point for slaves, they said, but probably just a door in a private residence.

"I decided I would find my own true stories," he recalled.

In 2000, Thiaw did some research on Goree Island but came to realize that some of the most meaningful artifacts of the slave trade were elsewhere. More than 1,000 slave ships had sunk around the world, according to archival records. Archeologists had barely scratched the surface of what they held.

His timing was perfect. The Smithsonian had just announced funding for research on the slave trade. Suddenly, Thiaw had a benefactor, at least for the first phase of the work, which cost about $35,000.

In May, Thiaw and six of his graduate students boarded a boat off a Dakar beach and sped into the Atlantic chop for their first research voyage. The archeologist handed out typewritten pages to his students with the names of boats.

There were two French vessels, the Nanette and the Bonne Amitie, that had disappeared in 1774 and 1790. There was a British sloop called Racehorse that had vanished in November 1780. All were thought to have sunk just miles off the coast. And there were hints of many others.

"There's so much down there," Thiaw said eagerly.

Once enough evidence emerged that a wreck had been found, the team would start intensive diving.

No one on the team wanted to think about how long their quest might last, or whether their funding would be sufficient. It took researchers more than a decade to locate and document the remains of the São José off Cape Town, South Africa. That discovery was announced only last year.

For many years, what was known about the slaves' "middle passage" across the Atlantic came largely from the documents of slave traders, things like tax records, receipts and diaries. It was useful information, but difficult to verify and clinical in its description of the inhumanity shown to slaves.

But, as Thiaw found, the quest could be frustrating. In the first few weeks of searching, he and his team made a few preliminary dives, but they discovered only sunken fishing boats. Now Thiaw is worrying about lining up additional funding, and keeping his graduate students involved, because some will graduate soon.

"If I can't keep them focused on this program, maybe they will move on," Thiaw said. "I'm getting nervous."

Book Revisited: Witness for the archeologist

Come, Tell Me How You Live, an Archaeological Memoir, by Agatha Christie Mallowan, William Morrow, 1946, 205 pages

Agatha Christie had another life that didn't include Miss Marple, Hercule Poirot or even Tommy and Tuppence. It was her real life, what she did when she wasn't, and sometimes when she was, plotting elaborate death scenarios.

Starting in 1930 this life revolved a man she met and married that year, British Mideastern archeologist Max Mallowan.

"Come, Tell Me How You Live" is her engaging response to that frequently asked question when people learn who her husband was and that she accompanied him on his yearly digs in Syria. It is a book about what they did, the people who accompanied them, their unplanned adventures and, of course, how they lived.

Mixed in are details of their work, not in bogging-down technical detail but in colorful description and anecdote. For instance, how did they decide where to dig. They examined tells (mounds) looking for three essentials: It must be near a supply of workers, there must be water reasonably close and "it must give indications of having the right stuff in it."

They were looking for ancient pre-Roman material and one thing they did not want to find was Roman ruins. Roman ruins could mean seasons wasted digging through them to get to "the right stuff."

"All digging is a gamble – among seventy Tells all occupied in the same period, who is to say which one holds a building, or a deposit of tablets, or a collection of objects of special interest? A small Tell offers as good prospects as a large Tell, since the more important towns are the more likely to have been looted and destroyed in the far-distant past. Luck is the predominant factor."

In their excavating, the archeologists are more supervisors than hands-on. Most work is done by three classes of workers: a pickman who break the ground with a pick, a spademan who follows him and puts the earth into baskets and three or four basket boys who carry the earth to a dump. All three look for artifacts, the finding of which results in cash rewards. If something large is found in situ, Mallowan or his assistant are called in for careful excavation.

Living conditions generally ran the gamut from primitive to primitive. Bedrooms often came equipped with mice, cockroaches and an assortment of insects. One morning 107 fleas were found in the waistband of Mallowan's pajamas.

Roads are occasional things and bridges over wadis and rivers a rare luxury, leading to episodes to which Christie applies a humorous touch that she may not have felt at the time.

All problems are complicated by, if not caused by, some of the people they have hired to help them out. A man who insists he is a driver despite failing numerous opportunities to prove it. An assistant who is so guided by thoughts of economy that he purchased a derelict horse instead of a good one because it was cheaper. Or who would cause their car to run out of gas in the middle of the desert because he was curious how far it could go on a tank of gas. ("Idiot!" cried Mallowan to no avail.) Another fellow they figured must be honest because he was too dumb to be dishonest.

Not all the local hires were undependable, but they made the better stories. The others are credited.

Christie adjusted nicely to the different climate (usually) and different cultures (also usually). Their crews were a mixture of Arabs, Armenians and Kurds and the bonding was far from seemless. She spoke almost no Arabic, which sometimes caused periods of not understanding (four people dead? Really? Who? Why? How? Can't anyone explain? What a time for fluent Max to be elsewhere.)

Early on, when they were looking for just the right tell to excavate, she found herself unexpectedly limping. It turned out they always went around the sloping mounds in the same direction and her shoes had worn down unevenly.

As they packed up one year, she thought, "It will be good to see England again. Good to see friends and green grass and tall trees. But it will be good, too, to return next year."

Agatha Christie is a first-class chronicler. She enjoyed her adventures; you will too.

-- Myron Beckenstein

What Otzi, the well−dressed Iceman, chose to wear

By Rachel Feltman

Condensed from the Washington Post, August 23, 2016

Otzi, *who* are you wearing?

When Otzi the Iceman was discovered in 1991, his 5,300-year-old body had been remarkably well preserved by his glacial tomb. And while they weren't exactly runway ready, his clothes held up pretty nicely as well. The garments were clearly made of animal skins and furs, but scientists had no way of knowing what species the scrappy ensemble had come from.

DNA sequencing has come a long way since then, and now we've finally gotten a peek into Copper Age wardrobe choices. According to a study Thursday in Nature Reports, Otzi was wearing at least five different animals when he met his maker. For now, the team has analyzed the mitochondrial DNA in his leggings (goat), loincloth (sheep), shoelace (cow leather), hat (brown bear), coat (sheep and goat) and quiver (roe deer).

In fact, Otzi's coat alone contained the hides of four different individual animals, suggesting that individuals might have patched up their clothing with random pelts as needed. But the researchers don't think the Iceman got dressed in the dark.

"It's not chaotic," study author Frank Maixner of the Institute for Mummies and the Iceman told Smithsonian Magazine. For example, cow leather, which was found in Otzi's shoes, was the sturdiest material on his body – suggesting his boots were made for walking. Sheep leather, which made up parts of his striped coat, would have kept him warmer than other materials. And his leggings are made of the same material as some other Copper Age legwear found nearby, suggesting that goatskin was chosen for a reason.

"It's really ordered, there's a structure, there's a fashion, in my eyes," Maixner said.

The analysis provides a wealth of information about how Otzi's people lived. After all, fashion choices were far from frivolous at the time: The species found on Otzi's body contribute to our knowledge of what animals his people domesticated (previous studies had suggested he spent his life farming and herding animals) or hunted (his last meal contained ibex and deer). But it's also possible that Otzi got some of his leathers – or even finished pieces of clothing – by trading with folks from other regions.

Unless we find some other astonishingly well-preserved icemen sitting around the alps and cross-check their wardrobe choices, we may never know.

Fire archeologists go to blazes to find sites

Continued from Page One

directions than previously thought. He could tell this, he said, in part by finding obsidian tools there.

As he spoke, crowds of tourists milled about the valley. A major threat to artifacts uncovered by fire is looting: tourists or hikers will sometimes pick up artifacts as souvenirs or to sell, archeologists say. Gassaway said sometimes firefighters themselves will take an old bottle or other artifact as a keepsake.

Lacking staff to adequately monitor for looters, archeologists often train volunteers to help keep an eye on historic sites until they are covered again by new vegetation.

A fire itself can "totally devastate" historic structures, while leaving the site exposed to erosion, said Tad Britt, chief of archeology and collections for the Interior Department's National Center for Preservation Technology and Training.

The 2011 Las Conchas Fire in New Mexico's Santa Fe National Forest burned more than 2,000 historical sites, said Jennifer Dyer, the fire archeologist there at the time.

The firefighting crews, and their vehicles and chemicals, also pose threats, a reason for archeologists to accompany them. To help keep bulldozers off sensitive areas, Dirk Charley, an archeologist and tribal relations specialist for the Sequoia and Sierra national forests in California, said he consults with local Native Americans during firefighting and preservation efforts. Charley, a Native American, said he often enlists tribe members to survey the burnt landscape with him and unlock its secret past.

Last chance to nominate for 2016 Marye Award

September 12 is the deadline for submitting nominations for this year's William B. Marye Award. ASM's highest honor will be presented at the Annual Meeting in Frederick County October 22. The award goes to someone for outstanding contributions to Maryland archeology. But the recipient need not be an archeologist, Marylander or member of ASM. Outstanding contribution is the key. Time for delay in submitting a nomination is over. The nomination form is with this newsletter.

Piltdown Man story goes down and down and down

By Sarah Kaplan

Condensed from the Washington Post, August 11, 2016

When Piltdown Man was unveiled before a meeting of London's geologists in 1912, he was heralded as paleoanthropology's "missing link," the long-sought transitional form between modern humans and our great ape ancestor. He had a smallish skull, a chimp-like jaw, and a mixture of primitive and modern teeth to boot. Plus, he was a local; to this gathering of Brits, it would have seemed completely right and proper that humankind got its start just down the road in Sussex.

There was just one problem: He was a fake.

In 1953, scientists at the British Natural History Museum and University of Oxford reported that the Piltdown fossil was actually a hodgepodge of human and orangutan bones, none of them more than 720 years old. The remains had been meticulously worn down with a file and stained with iron and acid to give the appearance of age. Dental putty was used to hold the teeth in place.

The scientists called the fake "extraordinarily skillful," and the hoax "so entirely unscrupulous and inexplicable as to find no parallel in the history of paleontological discovery."

Writing in the journal Royal Society Open Science, a new team of investigators says the Piltdown forgery was the work of one man — solicitor and amateur archeologist Charles Dawson, who first "uncovered" the remains.

"Whether Dawson acted alone is uncertain, but his hunger for acclaim may have driven him to risk his reputation and misdirect the course of anthropology for decades," the researchers write. "The Piltdown hoax stands as a cautionary tale to scientists not to be led by preconceived ideas, but to use scientific integrity and rigor in the face of novel discoveries."

The first mention of the skull came in February 1912, when Dawson sent a letter to his friend Sir Arthur Smith Woodward, head of geology at the British Museum, about an exciting new skull he'd uncovered on his land near the town of Piltdown.

Later "excavations" at two Piltdown sites revealed a jaw bone, teeth, stone tools and a piece of carved fossil bone deemed a "cricket bat." They also cast a cloud of suspicion over everyone who took part.

The consequences of the forgery were long-lasting. The belief that modern humans evolved in Britain persisted for another 40 years — it was so ingrained that many scientists dismissed a real archaic human fossil, the Taung Child, when it was uncovered in South Africa in 1924. And the hoax weakened the public's trust in science. Even today, creationists point to Piltdown Man to justify their suspicion of evolution.

To figure out who was responsible, paleoanthropologist Isabelle De Groote and more than a dozen other researchers re-examined the skull and attempted to retrace how it was made. Their techniques — DNA sequencing, spectroscopic analysis — weren't available to the scientists who exposed the hoax in 1953 and indeed may have seemed even more improbable to Dawson's colleagues than the idea of Piltdown Man himself.

"Understanding what was used to fake the fossil that misled scientists for four decades and how they were manufactured may bring us closer to identifying whether there were one or more hoaxers, and why they would have risked their reputation to fool the scientific community," De Groote and her team write.

They started their search with the orangutan mandible. DNA sequencing indicated that the jaw and all the teeth came from the skull of one orangutan, even a tooth Dawson claimed to have found at a second Piltdown site several kilometers away. It's likely that the skull was purchased at a curiosity shop and broken into pieces. The researchers believe that at least two, and possibly three, skulls were used to make the cranial "fossil."

But the overall *modus operandi* of the forger was skillful and incredibly consistent, and only one of the 20 or so people who have been implicated in the hoax could have achieved the whole thing: Charles Dawson.

"The story originated with him," the authors write. "Nothing was ever found at the site when Dawson was not there, he is the only known person directly associated with the supposed finds at the second Piltdown site, the exact whereabouts of which he never revealed, and no further significant fossils, mammal or human, were discovered in the localities after his death in 1916."

Dawson was an experienced fossil hunter (and faker — a number of his other finds ultimately turned out to be hoaxes) who had friends in the paleontology community and a thorough understanding of what a "missing link" fossil ought to look like.

"When a jaw and the skull bones were announced, there was a big discussion at the Geological Society about what the canine in such an animal would look like," De Groote told the BBC. "And, ta-da — six or seven months later, a canine shows up and it looks exactly like what they had predicted."

A look at Dawson's letters revealed why an apparently successful solicitor and respected amateur scientist would attempt such an audacious hoax. By age 45 he'd written or co-authored more than 50 scientific articles but was still waiting for recognition as an archeologist. In 1909, he wrote, "I have been waiting for the big 'find' which never seems to come along." He dreamed of being elected a fellow of the Royal Society but was never nominated — until he announced the Piltdown discovery.

The study authors' chief criticism is reserved not for Dawson but for the scientists who believed him. Piltdown Man met turn-of-the-century researchers' preconceived notions for what an archaic human fossil would look like — so they were far less skeptical than they ought to have been.

Chapter notes

In addition to the listed chapters, ASM has a chapter at the Community College of Baltimore County, led by Nina Brown, and a club at Huntingtown High School in Calvert County, run by Jeff Cunningham.

Anne Arundel

Meets the second Tuesday of the month at the Severna Park Branch Library, 45 West McKinsey Road. 7:30 p.m. Contact AAChapASM@hotmail.com or the chapter website http://www.aachapasm.org/calendar.html

Central Chapter

For information contact centralchapterasm @yahoo.com or stephenisrael2701@comcast.net 410-945-5514. Or on Facebook, www.facebook.com/asmcentralchapter or http://asmcentralchapter.weebly.com/

Charles County

Meetings are held at 7 p.m. on the second Thursday (September–May) in the community room of the LaPlata Police Department. Contact President Carol Cowherd at cowherdcl@gmail.com or 410-533-1390. Chapter website is charlescoasm.org and its blog is ccarchsoc.blogspot.com

September 8: Valerie Hall on the Veterans Curation Program.

Mid−Potomac

The chapter meets the third Thursday of the month at 7:30 p.m. at Needwood Mansion in Derwood. Dinner at a local restaurant at 5:30 p.m. Contact heather.bouslog@mncppc-mc.org or 301-563-7530 or Don Housley at donhou704@earthlink.net or 301-424-8526. Chapter website: http://www.asmmidpotomac.org Email: asmmidpotomac@gmail.com Facebook page: http://www.facebook.com/pages/Mid-Potomac-Archaeology/182856471768

September 15: Ralph Buglass, local historian, will speak on the history of Sugarloaf Mountain.

October 2: Frank Sanford, chapter member, will speak on his archeology volunteer experience in Italy.

Monocacy

The chapter meets in the C. Burr Artz Library in Frederick the second Wednesday of the month at 6 p.m. For more information, visit the chapter's web page at digfrederick.com or call 301-378-0212.

September 15: Julie King of St. Mary's College of Maryland will describe efforts by the college, the Piscataway of southern Maryland and the Rappahannock of Virginia to map the ancestral and contemporary Native landscapes of the Chesapeake region.

Northern Chesapeake

Meetings are the second Wednesday of the month. Members and guests assemble at 6:30 for light refreshments. A business meeting at 7 is followed by the presentation at 7:30. Contact Dan Coates at 410-273-9619 or dancoates@comcast.net Website: http://sites.google.com/site/northernchesapeake

St. Mary's County

Meetings are the third Monday of the month at St. Francis Xavier Church in Newtown or at St. Mary's College. For information contact Chris Coogan at Clcoogan@smcm.edu

Upper Patuxent

Meets the second Monday at 7 p.m. at 9944 Route 108 in Ellicott City. Labs are the second and fourth Saturdays. On Facebook, www.facebook.com/pages/Upper-Patuxent-Archaeology-Group/464236446964358 or try UPArchaeologygroup@yahoo.com orhttp://uparchaeologygroup.weebly.com/

September 12: Lee Preston delivers the Vaughn Brown memorial lecture.

Western Maryland

Programs are the fourth Friday of the month, at 7:30 p.m. in the LaVale Library, unless noted. Contact Roy Brown, 301-724-7769. Email: wmdasm@yahoo.com Website: http://sites.google.com/site/wmdasm

September 17: Appalachian Folk Festival at Frostburg State University. Chapter members will man a booth displaying artifacts and literature on western Maryland.

September 23: Mary Catie Snider of Potomac State College will report on a large Late Archaic/Woodland site along the Tennessee River in Alabama. Rich in lithics and pottery, the site contained over 300 burials.

October 28: Rita Knox, NPS Ranger at the C&O Canal National Historical Park, will present the last 30 miles of the Canal from the Paw Paw Tunnel to its end at the western terminus at Cumberland.

November 19, 1:00 PM: A field trip to historic Ridgedal Farm at Springfield, W.V., location of a French & Indian War era fort and Indian mound.

December: No Chapter meeting due to the holiday.

The Archeological Society of Maryland Inc. is a statewide nonprofit organization devoted to the study and conservation of Maryland archeology.

ASM members receive the monthly newsletter, ASM Ink; the biannual journal, MARYLAND ARCHEOLOGY, reduced admission to ASM events and a 10 percent discount on items sold by the Society. Contact Membership Secretary Jo Boodon, PO Box 1584, Ellicott City, MD 21043 for membership rates. For publication sales, not including newsletter or Journal, contact Dan Coates at ASM Publications, 716 Country Club Rd., Havre de Grace, MD 21078-2104 or 410-273-9619 or dancoates@comcast.net

Submissions. Please send to Myron Beckenstein, 6817 Pineway, University Park, MD. 20782, 301-864-5289 or myronbeck@verizon.net