# Groundbreaking discovery reveals Africa's oldest cremation pyre and complex ritual practices

**CLEVELAND, OH—January 1, 2026—** A new study published this week in *Science Advances* reports the earliest evidence of cremation in Africa,and the world's oldest known *in situ* cremation pyre for an adult. The research was conducted by an international team of scholars from the United States, Africa, and Europe and was co-led by Dr. Elizabeth Sawchuk, Curator of Human Evolution at the Cleveland Museum of Natural History.

About 9,500 years ago, a community of hunter-gatherers in central Africa cremated a small woman on an open pyre at the base of Mount Hora, a prominent natural landmark in northern Malawi, according to a new study. It is the first time this behavior has been documented archaeologically in the African hunter-gatherer record.

The study provides the earliest evidence of intentional cremation in Africa and describes the world's oldest known *in situ* cremation pyre containing the remains of an adult. While burned human remains appear as early as ~40,000 years at Lake Mungo, Australia, pyres—intentionally built structures of combustible fuel—do not appear in the archaeological record until nearly 30,000 years later.

Using archaeological, geospatial, forensic, and bioarchaeological methods, including microscopic examination of the pyre sediments and detailed analysis of the human bone fragments, the researchers reconstructed the extraordinary sequence of events surrounding the cremation in unprecedented detail. Their findings demonstrate that the mortuary and other social behaviors of ancient African foragers were far more complex than previously thought.

"Cremation is very rare among ancient and modern hunter-gatherers, at least partially because pyres require a huge amount of labor, time, and fuel to transform a body into fragmented and calcined bone and ash," said lead author Jessica Cerezo-Román, an associate professor of anthropology at the University of Oklahoma.

"Not only is this the earliest cremation in Africa, it was such a spectacle that we have to re-think how we view group labor and ritual in these ancient hunter-gatherer communities," adds senior author Jessica Thompson, an assistant professor of anthropology at Yale University, who leads a long-term research project at the site of the discovery in collaboration with the Malawi Department of Museums and Monuments.

The oldest evidence for an *in situ* pyre dates to about 11,500 years ago from the Xaasaa Na' (Upward Sun River) archaeological site in Alaska and contains the remains of a child about three years old. Prior to the discovery of the pyre at Mount Hora, the first definitive cremations in Africa appeared around 3,500 years ago in Kenya and were associated with Pastoral Neolithic herders. Cremation is more common among ancient food producing societies, who generally possess more complex technology and engage in more elaborate mortuary rituals than earlier hunter-gatherers.

The cremation site, Hora 1, is under an overhang at the base of a granite inselberg (a large rocky hill or mountain) that rises several hundred feet from the surrounding plain. Archaeological research in the 1950s revealed that the site was used as a hunter-gatherer burial ground, but how long ago remained unknown. Thompson's work starting in 2016 showed that people first inhabited the site about 21,000 years ago and used it for burials between about 16,000 and 8000 years ago, with all the people interred in a complete state. By contrast, the cremation pyre from ~9500 years ago was part of an ash feature the size of a queen bed and containing a single highly fragmented individual. There is no evidence of anyone else being cremated at the site before or after.

An analysis of the 170 human bone fragments excavated from the pyre — mostly from arms and legs — suggest that the person cremated was an adult woman between 18 and 60 years old and just under five feet tall. By looking at her bones and the patterns of thermal alteration, the team determined her body was cremated prior to decomposition, probably within a few days of her death. Cutmarks on several limb bones suggest parts of her body were defleshed or removed.

"Surprisingly, there were no fragments of teeth or skull bones in the pyre," said Elizabeth Sawchuk, bioarchaeologist and Curator of Human Evolution at the Cleveland Museum of Natural History. . "Because those parts are usually preserved in cremations, we believe the head may have been removed prior to burning."

Building the pyre required gathering at least 30kg of deadwood and grass, pointing toward significant communal effort, the researchers said. Participants actively disturbed the fire during burning and continually added fuel to sustain high temperatures, according to the analysis of ash sediments and bone fragments. Evidence suggests the blaze reached temperatures greater than 500°C. Discovery of stone tools within the pyre suggest they were either added to or embedded within the burning remains, perhaps as funerary objects.

"These hands-on manipulations, cutting flesh from the bones and removing the skull, sound very gruesome, but there are many reasons people may have done this associated with remembrance, social memory, and ancestral veneration," said Cerezo-Román. "There is growing evidence among ancient hunter-gatherers in Malawi for mortuary rituals that include posthumous removal, curation, and secondary reburial of body parts, perhaps as tokens."

The team also found evidence that about 700 years before the pyre event, the location had been the site of large fires. Then, within 500 years after the cremation event, multiple additional large fires were lit atop the pyre itself. Although no one else was cremated, this suggests that people remembered the pyre's location and recognized its ongoing significance. The history of large fires in this location, the effort associated with the cremation, and the subsequent burning events reflect a deep-rooted tradition at the site linked to ritual behavior and memory-making tied to a place that was clearly a local landmark.

While the cremation process is now clear, the motivation behind the event remains mysterious.

"Why was this one woman cremated when the other burials at the site were not treated that way?" Thompson said. "There must have been something specific about her that warranted special treatment."

Read more about the discovery at *The Conversation*.

**About the Cleveland Museum of Natural History**

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