

ARTIFACT OF THE MONTH

The ability to control fire may be the single most important technological advancement in history. Past populations restructured the way humans lived by learning to control fire as a tool. Last month's artifact was a good example of past populations using fire for functional light source. While many of the artifacts recovered by TAS (Tribal Archaeology Section) are altered by fire, few of them show such a clear sign of human activity as this hearthstone.

A hearth is a structure designed around a fire using stones to insulate and protect the flame. Hearths can be built in many forms. To modern people, a hearth might look like a fireplace, while to older populations it may be a stonelined campfire. The presence of a hearthstone serves as evidence of humans using fire to either cook food or keep warm ([Kelley, 2024](#)).

Hearthstones are an example of heat affected stones, also called fire altered rocks (FAR), heat altered rocks (HAR), or fire cracked rock (FCR). These are stones that show recognizable traits of being used alongside fire, such as changes in texture, color, or the presence of breaks and fractures ([Speth, 2015](#)). Our hearthstone shows significant cracks along one side and has a white coloration that is associated with ash. Heat affected stones may have been used for any number of purposes, such as stone boiling, hearthstones, longer lasting heat sources, stone griddles, and more.



Figure 1: The 'top' side of the hearthstone. Likely to be the side that was exposed to fire due to the sooting (blackened discoloration) and 'pot-lid' fracturing scars, shown by the arrow

Figure 2: An example of an open hearth. This style of hearth might be like the one the THPO hearthstone helped shape.



HAR can serve as a vital source of information for identifying the ways that past populations were using heat to make their lives better. In the past few years, some archaeologists have been trying to start a dialogue about how overlooked these artifacts tend to be ([Cantelli et al., 2024](#)). Usually, sites that include hearths or other types of HAR also include artifacts that are more traditionally popular among archaeologists and the public. The very site that this hearthstone was recovered from also included artifacts like shark teeth and pottery sherds.

Despite HAR being broadly understudied artifacts, archaeologists are working towards applying research methods that they've learned from studying how pottery is cooked to learn more from stones like our hearthstone ([Neubauer, 2018](#)). The humble hearthstone represents home, comfort and a full stomach, and may serve as a reminder that sometimes the most mundane things might be of great importance.

Cantelli, M., Terradas, X., Binder, D., Regert, M., & Colonese, A. C. (2024). Diamonds in the rough - reconsidering the scientific and heritage value of heataltered stones in prehistoric archaeology through a systematic literature review. *Open research Europe*, 4, 254. <https://doi.org/10.12688/openreseurope.18837.1>

Kelley, E. (2024). FIRECRACKED ROCKS AT ALM SHELTER (48BH3457): AN EXPERIMENTAL STUDY. University of Wyoming. <https://wyoscholar.uwyo.edu/entities/publication/41f5fc3de5cd40899375f3d37ab3c767>

Neubauer, Fernanda. (2018). USEALTERATION ANALYSIS OF FIRECRACKED ROCKS. *American Antiquity*. 83. 681700. 10.1017/aaq.2018.33. <https://www.cambridge.org/core/journals/americanantiquity/article/abs/usealterationanalysisoffirecrackedrocks/C533B87CF2607BF2F4408EFF44E52EA8>

Speth, J. (2015). When Did Humans Learn to Boil? *PaleoAnthropology*, 2015:5467. <https://carta.anthropogeny.org/libraries/bibliography/whendidhumanslearnboil>

