

# Requiem for a Mammoth



## The Hunt: 8,000 BC

The wind danced across the blades of frost-tinged grass, ruffling Intuk's obsidian-colored hair. The leader of a trio of elk-skin-clad hunters, he slid his atlatl, tipped with a fluted projectile point, past a fading cluster of Arctic poppy. Muscles tensed, he trembled slightly in anticipation. As the mammoth lowered its head to grasp a clump of grass in its trunk, the three rose as one, drew back their arms and threw from toe to torso, shoulder and wrist to bury flaked ivory Clovis points deep into the giant pachyderm's flesh.

That night, the tribe feasted; in the morning, they packed out what meat they could carry as they completed their journey to overwinter in the fog-shrouded forest beyond the coastal plains. In time, the sea level rose and the skull of the slain mammoth came to rest in sand and silt for 10,000 years, till only huge molars half the size of cinderblocks remained. This stately creature's life story lay preserved in wavy lines of dentine as unique as a fingerprint.

## The Search: 2018 A.D.

Rory smiled as he raised the wire basket from the Alaskan seabed. As the fine sand and organic debris spilled out the sides, he could already see a nice haul of molars to clean and send to William Henry.

Freed from sandy obscurity, the mysterious message of this mammoth's grass-grinding teeth would be amplified through metamorphosis into distinctive works of art. In a sense as symbolic as a Neolithic cave painting, the mighty mammoth would rise and live again.

## The Craft: 2020 A.D.

After thousands of years, the human-mammoth symbiosis finds an atavistic renaissance in the workshop of acclaimed American brand crafter, **William Henry**. Founder and Lead Designer, Matt Conable, creates sublime keepsakes ideal for those seeking a special gift for the dentist "who has everything"; likely they do not have a bracelet, rosary, pocket knife or pen inlaid with polished mammoth molar. Yet, what better gift for a "tooth doctor" than an elegant rendering from one of Nature's largest, most fascinating dental models!

"We ethically source these ancient mammoth molars directly from relationships we have cultivated for over 20 years with individuals dedicated to finding and recovering these fossils," Conable says. "Harvested from the North Sea or off the Alaskan coast, each tooth has to dry for two years before we can even start to work it."



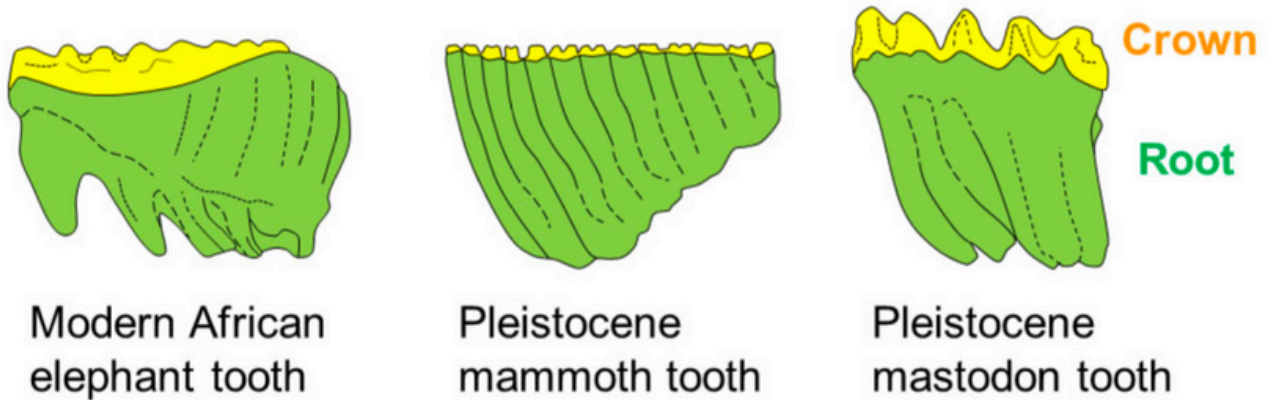
Matt Conable

“We carefully carve slices of each tooth and stabilize them with a special resin, and we never know what we are going to get until we do. Each tooth’s chewing surface has a completely unique color and pattern, so every pocketknife, pen and every bead in a bracelet is distinctive,” he says.

## The Teeth

Both mammoths and mastodons were large, ice age elephants that roamed the northern latitudes of the early pre-Columbian earth. Mammoths were generally larger, with longer tusks than mastodons, but the most telling distinction between them was the differences in their molar, or cheek teeth.<sup>1</sup>

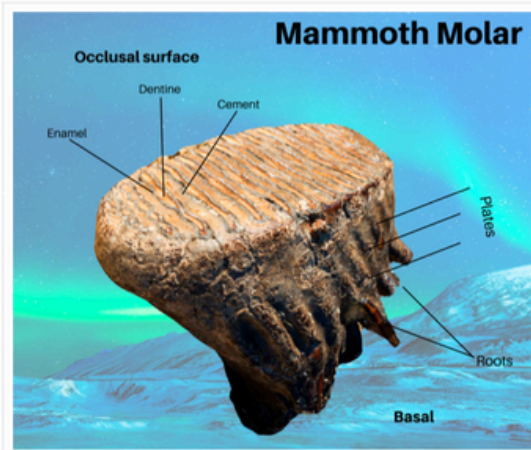
“Mammoth molars had broad crowns with small linear ridges, somewhat like a giant file, and were ideal for grinding food such as tall grasses. In contrast, the crowns on mastodon molars had high cones with cusps, which were better for breaking and chewing leaves and twigs,” according to Kentucky Geological Survey.<sup>1</sup>



Kentucky Geological Survey

Those linear ridges are what give the William Henry pieces such stunning variety of pattern, and texture. The color variations—generally blue, brown and tan—are a result of thousands of years of mineralization. Various mineral deposits in the surrounding soil imbue a singular character to each molar, such that no two molars are the same.

Mammoth teeth, composed of plates of dentine surrounded by enamel, are among the most complex of any known mammal. A series of these plates culminate in a crown held together by dentine, anchored by robust roots. The number of plates in each tooth is determined by species and the age of the tooth.<sup>2</sup>



Mammoths had six sets of teeth—three deciduous and three permanent—whereas most mammals have two. As molars wore out and were shed horizontally, each successive replacement tooth was larger and composed of more plates. Teeth ranged in size from about an inch at birth to 9-12 inches in the sixth and final set.<sup>2</sup>

Once a tooth is worn down from too much grinding, a new tooth grows behind it. The new tooth slowly moves forward and pushes the old one out. This leaves a fresh set of ridges for grinding food... the replacement process continues on until the sixth tooth is in place. This happens when the mammoth is about 30 years old. The mammoth uses the sixth molar for the rest of its life. Once the sixth tooth is worn down, there are no more replacement teeth. Without teeth, the mammoth can no longer eat and soon starves. Living elephants have a similar tooth pattern and live to be around 70 years old. So we assume that the average life span of a mammoth was probably 70 years.<sup>2</sup>

Interestingly, some mammoths may have been taken down by spearheads crafted from another type of tooth: mammoth tusks. Incredibly artistic projectile points were among the earliest works of craftsmanship of dental materials.

The procurement of mammoth tusks was associated with considerable effort or even risk, the material is challenging to work with lithic tools, and other suitable raw materials like antler and large mammal bone were always abundant. But even as woolly mammoths became increasingly rare and finally disappeared from Europe towards the end of the Late Glacial period, their ivory, which could be extracted from natural permafrost deposits, continued to be used by the societies of the Late Upper Paleolithic for projectile points whenever it was available in sufficient size and quality. Of course, the optical and haptic attractiveness of ivory is unsurpassed: No other biological raw material has such sublime colors and patterns and takes on such a smooth polish. This is why mammoth ivory was preferred in humankind's oldest portable artworks. In a projectile point, however, favorable mechanical properties like hardness and stiffness for efficient energy transfer into the prey as well as toughness for fracture resistance are crucial.”<sup>3</sup>

Both prehistoric and modern humans have utilized mammoth tusks in an unbroken line stretching back millennia, but the *molars* have been a more obscure and seemingly humble source material, until recently. It turns out that these fossilized grinders contain hidden beauty waiting to be revealed in the hands of a master.

For many thousands of years, humanity lived in a symbiotic dance with these monumental giants of the prehistoric world. Today, that legacy finds its renaissance in the elegant works of William Henry.

After so many, many years, the mammoth still has gifts to give.



## About William Henry

Watch Matt Conable demonstrate the process of turning a mammoth molar into a hand-crafted piece of art with its own unique story, HERE (<https://www.youtube.com/watch?v=J0XMcm3MD7s>).

**William Henry** (<https://www.williamhenry.com/>) is an American brand creating timeless personal style for men through unique accessories crafted with honor and integrity. The brand earned its fame for creating exclusive and award-winning pocket knives, and transforming the archetype of all tools into a superb piece of functional jewelry for men. Today's collections also include men's jewelry, writing instruments, money clips, cuff links, key chains. The seamless integration of classic natural materials, precious metals & gemstones, and state-of-the-art alloys is a hallmark of William Henry's work. But what makes this brand so distinctive is that it has proudly retained the aura and feel of an artisan workshop, where most pieces are designed and created exclusively in limited, often unique editions.

1. "Fossil of the month from the KGS paleontological collection: mammoth tooth." <https://www.uky.edu/KGS/fossils/fossil-month-05-2018-mammoth-tooth.php> (<https://www.uky.edu/KGS/fossils/fossil-month-05-2018-mammoth-tooth.php>)
2. <https://www.fossilera.com/pages/about-mammoth-molars> (<https://www.fossilera.com/pages/about-mammoth-molars>)
3. Pfeifer, S.J., Hartrampf, W.L., Kahlke, R. *et al.* "Mammoth ivory was the most suitable osseous raw material for the production of Late Pleistocene big game projectile points." *Sci Rep* 9, 2303 (2019).<https://doi.org/10.1038/s41598-019-38779-1> (<https://doi.org/10.1038/s41598-019-38779-1>)