



The Mammoth Site in Hot Springs, South Dakota was a happen-stance when it was first found in 1974. George Hanson, a heavy equipment operator, was grading a small hill to become a housing development on a 14-acre tract of land owned by Phil Anderson. Hanson's bulldozer struck what turned out to be a 7-foot tusk from a Mammoth elephant. <mammothsite.org>

Hanson contacted four universities in South Dakota and Nebraska, but they were not interested. Hanson's son Dan who had taken geology and archaeology classes contacted his former college professor, Dr. Larry Agenbroad, faculty at Chadron State College in Nebraska. What transpired in 1975, was the finding of an extraordinary number of fossils by Dr.

Agenbroad and Dr. Jim Mead (now site director

and chief scientist). It changed Anderson's mind in that his 14 acres were more valuable as a resource for scientific study than a housing project. <mammothsite.org>

The property became a non-profit organization which has grown into a museum and paleontology site. It is now a fully enclosed and climate-controlled dig site that has worldwide learning opportunities and is a major tourist attraction. It is considered the largest concentration of mammoths in the world and is still an active excavation site. <mammothsite.org>

Why this site? *"The Mammoth Site is a classic "karst" style sink hole. The roof of a porous limestone cavern collapsed, leaving, what cavers would consider a skylight. Paleontologists believe the collapse occurred over 140,000 years ago. At the bottom of the skylight was a spring that turned the hole into a steep sided pond. The ancient pond is approximately 120 by 150 feet across, and bore holes show the pond is at least 65 feet deep."* <fossilguy.com>

As we learned from a tour guide, there are both Colombian and Woolly mammoths found there. The size and tendency to live in different climate zones, made this find very interesting. No female mammoths have been found. The reason we were told was that the mammoths were more likely to tread from the herd. The site also unearthed bear, the American camel, llama, wolves, coyotes, shrub oxen, smaller animals, bird, fish and invertebrates.



Fossil excavation and preparation



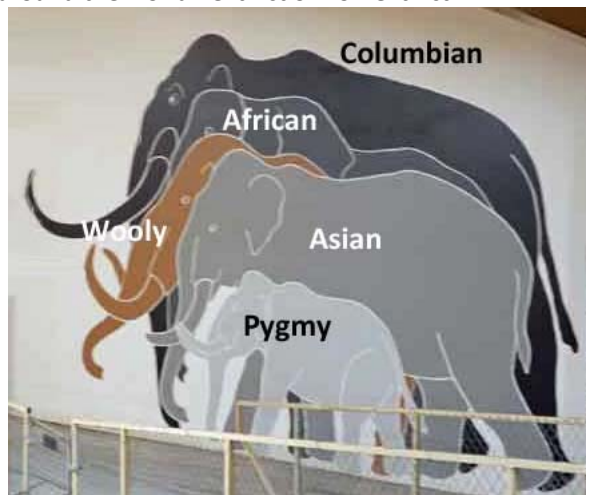
WELCOME, MAMMOTH SITE LAB VISITORS.
 YOU WILL SEE US WORKING ON SEVERAL PROJECTS HERE IN THE LAB.
 OUR GOAL IS TO PREPARE THE FOSSIL BONES FOR LONG TERM STORAGE. THIS PREPARATION IS THE FIRST STEP TOWARDS A FOSSIL'S USEFULNESS AS A RESEARCH SPECIMEN.

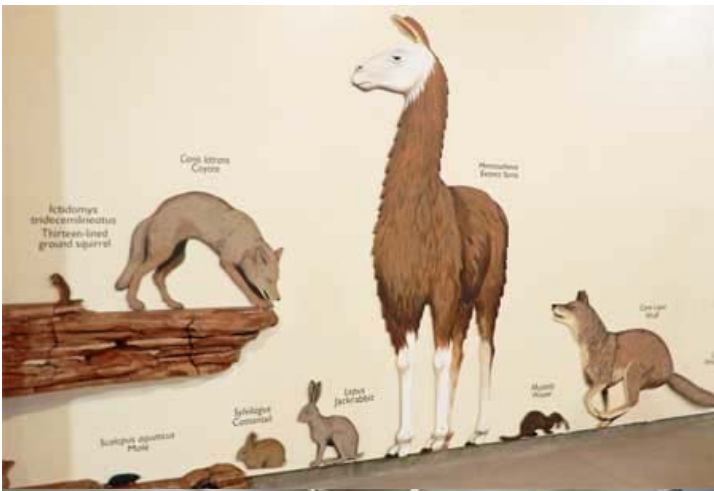
THIS IS ACCOMPLISHED IN A VARIETY OF WAYS

1. SOFT SEDIMENT IS REMOVED BY USING DENTAL PICKS AND OTHER SMALL TOOLS.
2. HARDER SEDIMENTS ARE REMOVED USING AIRSCRIBES AND MICRODACKS. THESE ARE SMALL DRILLS THAT USE COMPRESSED AIR TO CHIP AWAY AT THE CEMENTED SEDIMENT. THEY CAN BE VERY LOUD, SO IF YOU SEE US WEARING EAR AND EYE PROTECTION, THIS IS WHAT WE ARE DOING AND WE CANNOT HEAR YOU.
3. ACETONE (CH_3CO) IS USED TO CLEAN AND REMOVE OLD PRESERVATIVES FROM THE BONES.
4. CONSOLIDANTS ARE APPLIED TO BONES TO STABILIZE THEM. THESE CONSOLIDANTS ARE CAPABLE OF KEEPING THE BONES SAFE IN STORAGE FOR APPROXIMATELY THE NEXT 200 YEARS.



Comparison or notation of animals found here and the around the world - extinct or non-extinct





Sources: Guided tour, pamphlets and brochures, <https://www.mammothsite.org/>, <https://www.fossilguy.com/sites/mammoth-site/index.htm>, <https://www.yellowstonepark.com/road-trips/mammoth-site-in-south-dakota>, <https://www.atlasobscura.com/places/mammoth-site>, <https://www.visitrapidcity.com/things-to-do/attractions/mammoth-site-hot-springs>, <https://midwestwanderer.com/mammoth-site-hot-springs-south-dakota/> and <https://www.roadsideamerica.com/tip/4190>.

acuri.net John R. Vincenti The Mammoth Site: Hot Springs, SD