

he trumpet of a dying elephant echoes across a low-lying salty marshland surrounding a gushing spring. Nearby, herds of small horses and long-nosed peccaries – pig-like creatures – browse on the surrounding grasslands, avoiding the annoying burrows of pocket gophers. Half a mile to the southeast, an enormous tiger briefly stirs in the small cave that serves as its den. No, this is not the story of a safari to a distant land – unless time travel to the end of the Nashville's most recent Ice Age constitutes such a trek.

Eventually, the elephant remains or more properly an extinct distant relative of modern elephants known as a mastodon - sank deep into the mire and muck to lay entombed for more than 12,000 years. In late summer 1885, workers digging a sulphur well for what would become known as the Mastodon Sulphur Water Fountain and Bathing Establishment struck what they surmised to be a large log at some 27 feet below the corner of North Summer (5th Avenue North) and Harrison streets. Hauled to the surface, it proved to be an ivory tusk some nine inches in diameter. The old tiger - a sabertoothed version known as a smilodon died in its lair amidst the bones of its prey, eventually to be discovered about 30 feet deep during construction of the First American Center (now Regions Center) on Deaderick Street in 1971.

This wealth of extinct Ice Age animals buried deep beneath the streets and lots of modern Nashville was created by an exceptional feature of the landscape – the gushing fountain of salt impregnated mineral waters that would later become known as "Nashville's Sulphur Spring."

When the ancestors of modern Native Americans arrived during the last Ice Age in the Southeast, they too were drawn to that same remarkable place on the landscape by the concentration of game animals. By about A.D. 1150, descendants of those First Tennesseans had built an entire civilization centered on the Sulphur Spring Bottom, including multiple towns containing flat-topped earthen pyramids surmounted by community buildings, shrines and homes of the elite. By then



"The Mastodon Hunt" by Carlyle Urello *Previous page:* Vanderbilt University students and volunteers from the Southeastern Indian Antiquities Survey excavating smilodon cave deposits at the First American Center in 1971.

permanently settled and heavily reliant on maize as a staple food, production of salt as a dietary supplement was necessary – and also provided a valuable trade commodity with adjacent regions lacking salt.

Not long after A.D. 1450, these once thriving Nashville communities were abandoned following a series of three or more decade-long droughts. The area around Nashville would remain sparsely populated for nearly two centuries – until that same extraordinary spring resonated once again with new people and new cultures.

These new visitors were European fur traders and their Shawnee allies who probably first arrived sometime

during the mid-1600s, although few known documents survive. French maps label the Cumberland River as Riviere des Chaouanons, or Shawnee River. Traders like Martin Chartier and Jean de Charleville settled at "The French Lick" between 1690 and 1720. Upon ascending the river, the strong sulphurous vapors at the mouth of Lick Branch would undoubtedly have announced the presence of the enormous mineral spring. Such springs were known to fur traders as "Licks," because game animals congregated around them both to "lick" the briny soil and drink the waters.

Those same "licks" drew "longhunters" from Virginia and North

Carolina during the 1760s. In "A Reminiscence of the Nashville Sulphur Spring," (Daily American, 13 May 1880), Sampson Williams is reported to have visited the Lick to extract salt by boiling the water in kettles. His resulting share of salt after two weeks of work was 12 pounds – a year's supply for his family. Although early settlers continued to produce salt, later writers report that early well drilling efforts quickly "so diminished the quantity of salt that it was rendered practically worthless as a salt supply," (Daily American 8 May 1880). By the 1830s, the mineral waters were perceived as valuable primarily for their "healing qualities" in drinking and/or bathing.

When the first large contingent of permanent Euroamerican and African-American settlers arrived in Nashville in 1779-1780, the banks of Lick Creek were still littered with the scattered remains of the large-scale prehistoric salt industry. Eastin Morris, in his 1834 Tennessee Gazetteer, wrote: "the Sulphur Spring is situated... on French Lick Creek, between Cherry and Summer Streets [now 4th and 5th Avenues North]. The water is a strong salt sulphur, but clear, cold and palatable... Here are also cold and warm baths; and the curious observer can spend a leisure hour very satisfactorily, in examining the fragments of Indian pottery ware, ancient furnaces for making salt, and various aboriginal remains which exist here in great abundance."

TRC archaeologists documenting the saltworks during stadium construction in Nashville in March 2014. Note the depth of surrounding modern landfill.





A Mastodon tusk from Williamson County on display at the Tennessee State Museum. *Below:*Fragments of large salt pan collected near the Sulphur Spring by Gates P. Thruston in the 1880s.

Frequent mentions of the aboriginal riches around the sulphur spring are to be found throughout the 19th century. The *Republican Banner* (21 Oct 1868) notes that "all around the sulphur spring traces of the aborigines are manifest in the form of fragments of large pots and various implements..."

Archaeologists from around the country attending the August 1877 meeting of the American Association for the Advancement of Science took a field trip to the sulphur spring saltworks,

noting that pottery remained visible on the surface and protruding from the ridges near the spring.

Too prone to annual flooding for housing and most businesses, the Sulphur Spring Bottom became the outdoor recreational center of the city – something akin to an "accidental" Central Park as Nashville grew around it.

During the years preceding the Civil War, both formal and informal sport teams began to use the "commons north of the Sulphur Spring" to play

trip to the sulphur spring saltworks,

north of the Sulphur Spring" to play

"Brandon Klashings fem."

cricket and baseball; crowds gathered during the summer months to drink and bathe in the healing waters of Nashville's spas; and elephants returned to Nashville. Throughout the 19th and early 20th centuries, the commons north of the Sulphur Spring also served as the "Nashville Circus Grounds." The Republican Banner (13 Nov 1872) records that "the advent of Barnum's big circus and menagerie into the city yesterday morning created quite a sensation. He spread his tents all over Sulphur Spring Bottom." Two decades later, the Nashville American reported "The Circus Coming: Herds of Elephants and Rhinoceri by the Score" (17 Apr 1890) – and even specifically mention "At the Circus Grounds. Walter Main's big circus arrived in town yesterday morning... the unloading and removal to Sulphur Spring Bottom, the erection of tents and the watering ... of the big elephants" (16 Nov 1896) This time around, the elephants probably had peanuts to go with their salt.

Gates P. Thruston, Nashville's most famous antiquarian collector whose collection forms the core of the First Tennesseans exhibit at the Tennessee State Museum, was among the last to gather spectacular examples of these large salt-boiling pans in the late 1880s. Soon thereafter, Nashvillians embarked on one of the most ambitious landfill projects in the city's history – encasing Lick Creek in an enormous sewer and raising most of the Sulphur Spring Bottom 15 or more feet. The Sulphur Spring and its wealth of prehistoric remains would disappear from public view and modern archaeology for over a century - until early 2014, when both baseball and archaeologists returned to Sulphur Dell.

During construction of the new baseball stadium for the Nashville Sounds, contract archaeologists with the Nashville office of TRC Inc., uncovered our first modern glimpse into the salt industry of that ancient town. Although most of the stadium construction disturbed only modern landfill, two small areas revealed spectacular evidence of the technology and tools used by ancient Nashvillians to manufacture salt. This window into the

from Plate X, Gates P. Thruston, 1897,



The exterior surface of a typical large fabric-impressed pan sherd from the 2014 excavations.

past suggests that much of the area surrounding the Nashville Sulphur Spring around A.D. 1150 was an area of intensive salt production – littered with clusters of intensely burned pits (the prehistoric "furnaces" mentioned by early writers) along with multitudes of large pottery sherds primarily from broken salt boiling pans.

On-going studies of the over 1,000 artifacts recovered promise to yield further insights into the process of salt production, including radiocarbon dates that will tell us more about when it flourished. An additional window into the past is also emerging from these broken vessels. Ancient potters recycled their old textiles – clothing, bags, and other items – during production of many salt pans.

Almost certainly, shallow panshaped pits were lined with these discarded fabrics as an aid in lifting and separating the air-dried vessels from their molds prior to firing. Since fabrics almost always decay in archaeological sites, the "negative" fabric impressions left on their exteriors provide a nearly unique opportunity to learn more about another important and largely unknown ancient industry.

This brief modern glimpse into an ancient industry confirms that the land-fill placed in the late 1800s has protected a valuable archaeological resource from damage during Nashville's growth. To ensure their protection for future generations of researchers, a layer of clean fill was placed atop the

remaining undisturbed archaeological deposits before construction continued. In the coming months, a new permanent exhibit on the Nashville saltworks is planned for the Tennessee State Museum – along with interpretive markers on the greenway near the new stadium. When baseball returns to the Sulphur Spring Bottom and you're, "down in Sulphur Dell with a bag of peanuts and an umbrella" (Nashville American, 30 Apr 1909), another part of the story of that extraordinary Nashville landmark can now also be told.



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A closeup of the partially excavated T-shaped firepit showing heaving burning. Another small pit is located to the right.



History of Salt at Sulphur Dell

