PH0097341

Form 10-300
(July 1969)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY – NOMINATION FORM

(Type all entries – complete applicable sections)

STATE: Kentucky
COUNTY: Boone
FOR NPS USE ONLY
ENTRY NUMBER | DATE

RECEIVED AUG 1971 NATIONAL REGISTER

SEE INSTRUCTIONS

1. NAME

COMMON: Big Bone Lick State Park
AND/OR HISTORIC: Big Bone Lick

2. LOCATION

STREET AND NUMBER: Route # 1
CITY OR TOWN: Union
STATE: Kentucky | CODE: 21 | COUNTY: Boone | CODE: 015

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP		STATUS	ACCESSIBLE TO THE PUBLIC
☐ District ☐ Building	☒ Public	Public Acquisition:	☐ Occupied	Yes:
☒ Site ☐ Structure	☐ Private	☒ In Process	☒ Unoccupied	☒ Restricted
☐ Object	☐ Both	☐ Being Considered	☐ Preservation work in progress	☐ Unrestricted
		Additional Park acreage		☐ No

PRESENT USE *(Check One or More as Appropriate)*

☐ Agricultural	☐ Government	☒ Park	☐ Transportation	☐ Comments
☐ Commercial	☐ Industrial	☐ Private Residence	☒ Other *(Specify)* Day - use park with camping facilities	
☐ Educational	☐ Military	☐ Religious		
☐ Entertainment	☐ Museum	☐ Scientific		

4. OWNER OF PROPERTY

OWNER'S NAME: Kentucky Department of Parks
STREET AND NUMBER: State Office Building Annex
CITY OR TOWN: Frankfort | STATE: Kentucky | CODE: 21

5. LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC: Boone County Courthouse
STREET AND NUMBER: Main Street
CITY OR TOWN: Burlington | STATE: Kentucky | CODE: 21

6. REPRESENTATION IN EXISTING SURVEYS

TITLE OF SURVEY: Survey of Historic Sites in Kentucky
DATE OF SURVEY: March 1971 ☐ Federal XX State ☐ County ☐ Local
DEPOSITORY FOR SURVEY RECORDS: Kentucky Heritage Commission
STREET AND NUMBER: 401 Wapping Street
CITY OR TOWN: Frankfort | STATE: Kentucky | CODE: 21

STATE: | COUNTY: | FOR NPS USE ONLY: ENTRY NUMBER | DATE

7. DESCRIPTION

CONDITION	(Check One)					
	☐ Excellent	☐ Good	☒ Fair	☐ Deteriorated	☐ Ruins	☐ Unexposed
	(Check One)		(Check One)			
	☒ Altered	☐ Unaltered	☐ Moved	☒ Original Site		

DESCRIBE THE PRESENT AND ORIGINAL *(if known)* PHYSICAL APPEARANCE

The property proposed is now in acquisition as an addition to Big Bone Lick State Park. The 80 acres contain nearly all areas of historic significance. The 1,200 square feet comprising the Baker Cemetery is adjacent to the road leading towards the camping area. It is surrounded by a low wall.

Pleistocene remains were excavated by a group from the University of Nebraska funded in part by a grant from the National Science Foundation. The project was conducted from July 1962 until June 1967. All fossils removed were numbered and shipped to the University of Nebraska State Museum for preparation, identification and further study. The sites were occasionally open to the public while the excavations were in progress. A representative collection of artifacts is to be returned to the park when a museum is ready.

No structures remain that were associated with the area's history as a health resort, but the location of these structures is known. The Springs are less active than they were in the 19th century.

From the location of the old fort and salt works, relics have been recovered. These include a hogshead in which the salt produced had been stored.

The original appearance of the site in the 18th and 19th centuries is described in the statement of significance, #8.

SEE INSTRUCTIONS

8. SIGNIFICANCE

PERIOD *(Check One or More as Appropriate)*

[X] Pre-Columbian	[ ] 16th Century	[X] 18th Century	[ ] 20th Century
[ ] 15th Century	[ ] 17th Century	[X] 19th Century	

SPECIFIC DATE(S) *(If Applicable and Known)*

AREAS OF SIGNIFICANCE *(Check One or More as Appropriate)*

[ ] Aboriginal	[ ] Education	[ ] Political	[ ] Urban Planning
[XX] Prehistoric	[ ] Engineering	[ ] Religion/Philosophy	[ ] Other *(Specify)*
[ ] Historic	[ ] Industry	[XX] Science	
[ ] Agriculture	[ ] Invention	[ ] Sculpture	
[ ] Architecture	[ ] Landscape Architecture	[XX] Social/Humanitarian	
[ ] Art	[ ] Literature	[ ] Theater	
[ ] Commerce	[ ] Military	[ ] Transportation	
[ ] Communications	[ ] Music		
[ ] Conservation			

STATEMENT OF SIGNIFICANCE

During the Pleistocene age, enormous members of Herbivorous animals existed in this vicinity. The area is recognized as the key to understanding the life of the Ice Age on this continent over 10,000 years ago. The mammoth and the mastodon were among the mammals to visit the Lick. Ancestors of the sloth, bison and horse also frequented the area. All these came to eat the vegetation and to lick the salty earth around the springs. The land was soft and marshy and many of the animals became mired in the bogs and died, their bones trampled into the soft soil.

The area was widely known by the aboriginal tribes that inhabited the Ohio Valley. The Indians relied on these centrally located springs for much of their salt and a large amount of their game. An unexcavated mound in the area attests to their presence. White man learned of the existance of Big Bone Lick from Indians, such as the Delaware and Shawnee, who had visited there before.

The first explorer to visit was a French Canadian, de Longueil, in 1739. His was the first of many expeditions to the site. A map of Louisiana, dated 1744, marks the lick as the "place where they found the elephant bones in 1739." 1744 marked the first recorded removal of fossil bones from the lick by Indian trader Robert Smith. As word spread of the abundance of large bones, more explorers came and removed quantities of the relics.

The Shawnee Indians brought the first white woman to Kentucky. Mary Ingles had been captured and was accompanying the Indians when they came to Big Bone Lick on a salt making expedition. During this stay in 1756, she escaped and returned to her home in Virginia.

(see continuation sheet)

SEE INSTRUCTIONS

9. MAJOR BIBLIOGRAPHICAL REFERENCES

----, Baker Cemetery; M.L. Risner, Superintendent, Big Bone Lick S.P.

----, Big Bone Lick State Park; Spindletop Research Project No. 311, 1971.

----, Prospectus; Big Bone Lick Historic Shrine and State Recreation Park; Big Bone Lick Historical Association, Florence, Kentucky.

Collins, Lewis, Historical Sketches of Kentucky; J.A. & U.P. James, Cincinnati 1847. Page 52.

10. GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY

CORNER	LATITUDE Degrees	Minutes	Seconds	LONGITUDE Degrees	Minutes	Seconds
NW	38	53	16"	84	45	25"
NE	38	53	20"	84	45	05"
SE	38	53	01"	84	45	10"
SW	38	53	04"	84	45	30"

OR

LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES

LATITUDE Degrees	Minutes	Seconds	LONGITUDE Degrees	Minutes	Seconds
0	'	"	0	'	"

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: 80

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE

UTM

NE 16/695060/4306630
SE 16/694920/4306060
SW 16/694520/4306130
NW 16/694600/4306510

SEE INSTRUCTIONS

11. FORM PREPARED BY

NAME AND TITLE:
Kathy C. Lambert, Assistant Curator

ORGANIZATION
Kentucky Department of Parks

DATE
7/25/71

STREET AND NUMBER:
State Office Building Annex

CITY OR TOWN:
Frankfort

STATE
Kentucky

CODE
21

12. STATE LIAISON OFFICER CERTIFICATION

As the designated State Liaison Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service. The recommended level of significance of this nomination is:

National ☐ State ☐ Local ☐

Name _____

Title SLO

Date August 11, 1971

NATIONAL REGISTER VERIFICATION

I hereby certify that this property is included in the National Register.

Robert M. Utley
Chief, Office of Archeology and Historic Preservation

Date 6/13/72

ATTEST:

William Thomas
Keeper of The National Register

Date _____

Form 10-300a
(July 1969)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

(Continuation Sheet) # 1

STATE	
Kentucky	
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FOR NPS USE ONLY	
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(Number all entries)

#8 Statement of Significance:

In 1773, a survey party reported using the enormous ribs of the mammoth and mastodon for tent poles and the vertebrae as stools or seats. Explorers noted that the large bones lay scattered throughout the valley.

The first map of Kentucky, prepared by John Filson in 1784, bore on the legend: "Big Bone Lick; Salt and Medicinal Spring. Large bones are found there."

The expedition made by Captain William Clark to Big Bone Lick for President Jefferson was the first organized vertebrae paleotology expedition in the United States. (1807)

President Jefferson devoted much time to the study of Big Bone Lick and believed that some of the large animals might still be living in the country to the west. He had a room set aside in the White House for the display of the Big Bone collection. The collection was divided; parts went to Paris, France, Philadelphia and Jefferson's personal collection. His collection was unfortunately ground into fertilizer by a servant.

From 1831 to 1848, Big Bone Lick was visited by various Paleontologists and geologists. The lick was included in indexes of all the principal geological, paleontological and scientific journals in the United States, England, Germany and France.

The latest investigation of Big Bone Lick was conducted by the University of Nebraska. The five year dig was financed by grants from several research organizations (1962-1966)

Between 1756 and 1812, while excavations were continuing, the salt industry developed at Big Bone. The men at the salt works were threatened by Indian attacks and a fort was built for their protection. It required 500 or 600 gallons of water to make a bushel of salt. Two furnaces were erected to speed the process of evaporating the water from the salt, but the operation still proved too expensive to be profitable. The business was finally abandoned in 1812.

(see continuation sheet No. 2)

Form 10-300a
(July 1969)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
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(Continuation Sheet) #2

STATE	
Kentucky	
COUNTY	
Boone	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

(Number all entries)

Besides salt the springs were known for their medicinal qualities. In 1821, Big Bone Lick was one of the most celebrated resorts in that part of the Ohio Valley. A large hotel was erected and named Clay House, in honor of Henry Clay, the famous statesman from Lexington. The structure stood west of the springs on the old road to Louisville. Representatives of the best families in Kentucky visited here for health and pleasure.

Northeast of Clay House, with its spacious verandah, and across the road, stood a row of bath houses and a large open pavillion. But the popularity of the resort waned, possibly due to the drying up of the salt springs and in 1847 the place was deserted.

Another hotel was built about 1870 on the hill above the road north of the springs. This was never very popular and today is entirely gone.

The Baker Cemetery, located on the park, contains graves that date from the nineteenth century. The graves mark the remains of the members of the Steward Baker family by whom this land was owned. They maintained a large farm with numerous slaves. Local traditions state that many of the slaves were buried on the hill where campsites are now located.

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INVENTORY - NOMINATION FORM

(Continuation Sheet)

STATE	
Kentucky	
COUNTY	
Boone	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

(Number all entries)

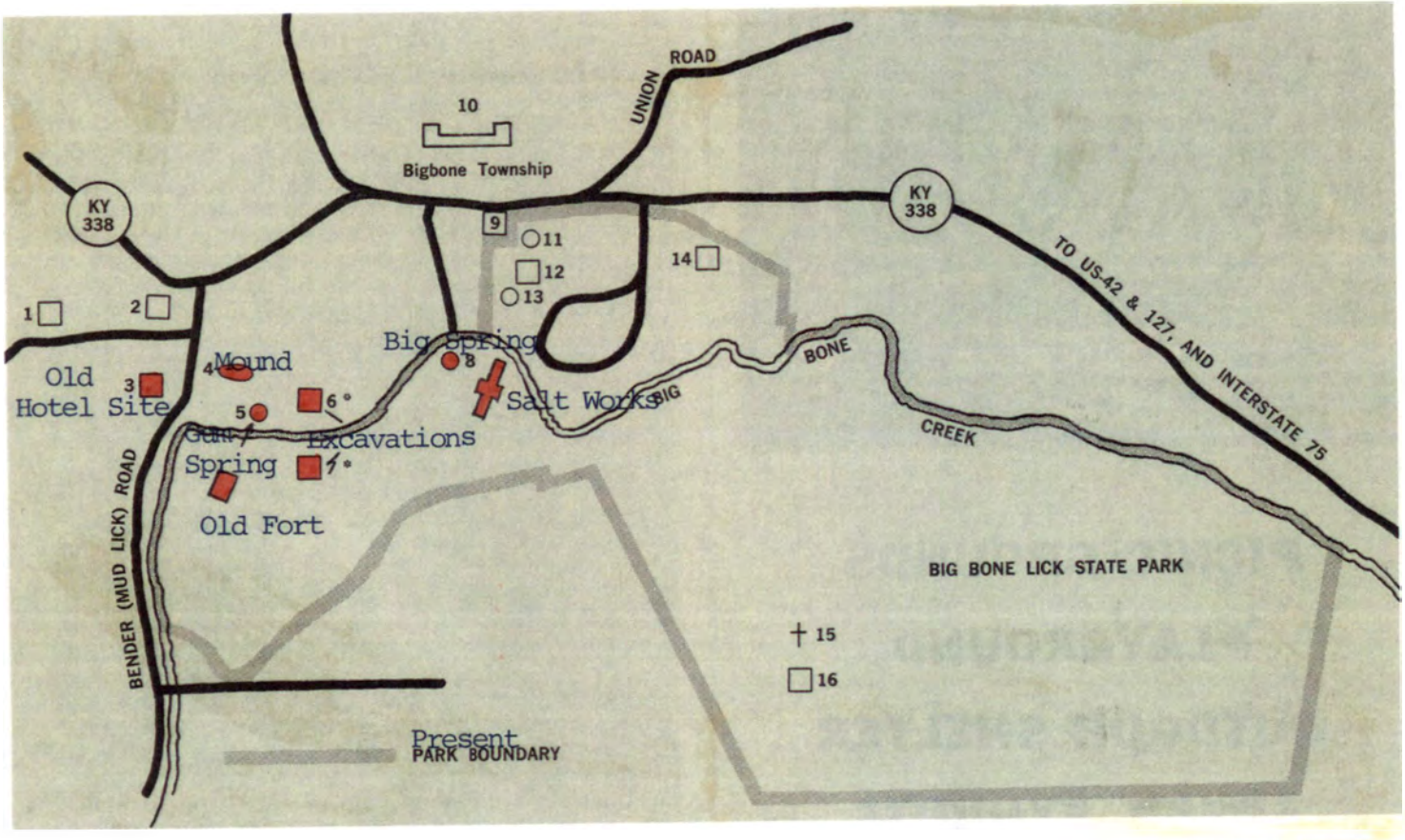
9 Bibliographical References (Cont'd)

Coleman, J.Winston, The Springs of Kentucky; The Winburn Press Lexington, Kentucky. 1955. pages 62 and 63.

Yealey, A. M., "Big Bone Lick," The Boone County Recorder

Revised Map Showing Areas Of Significance
November 24, 1971

Area: Big Bone Lick
State: Kentucky
County: Boone



UNIVERSITY OF NEBRASKA NEWS

Museum Notes

From the University of Nebraska State Museum, 14th and U Streets

Number 33 March, 1967

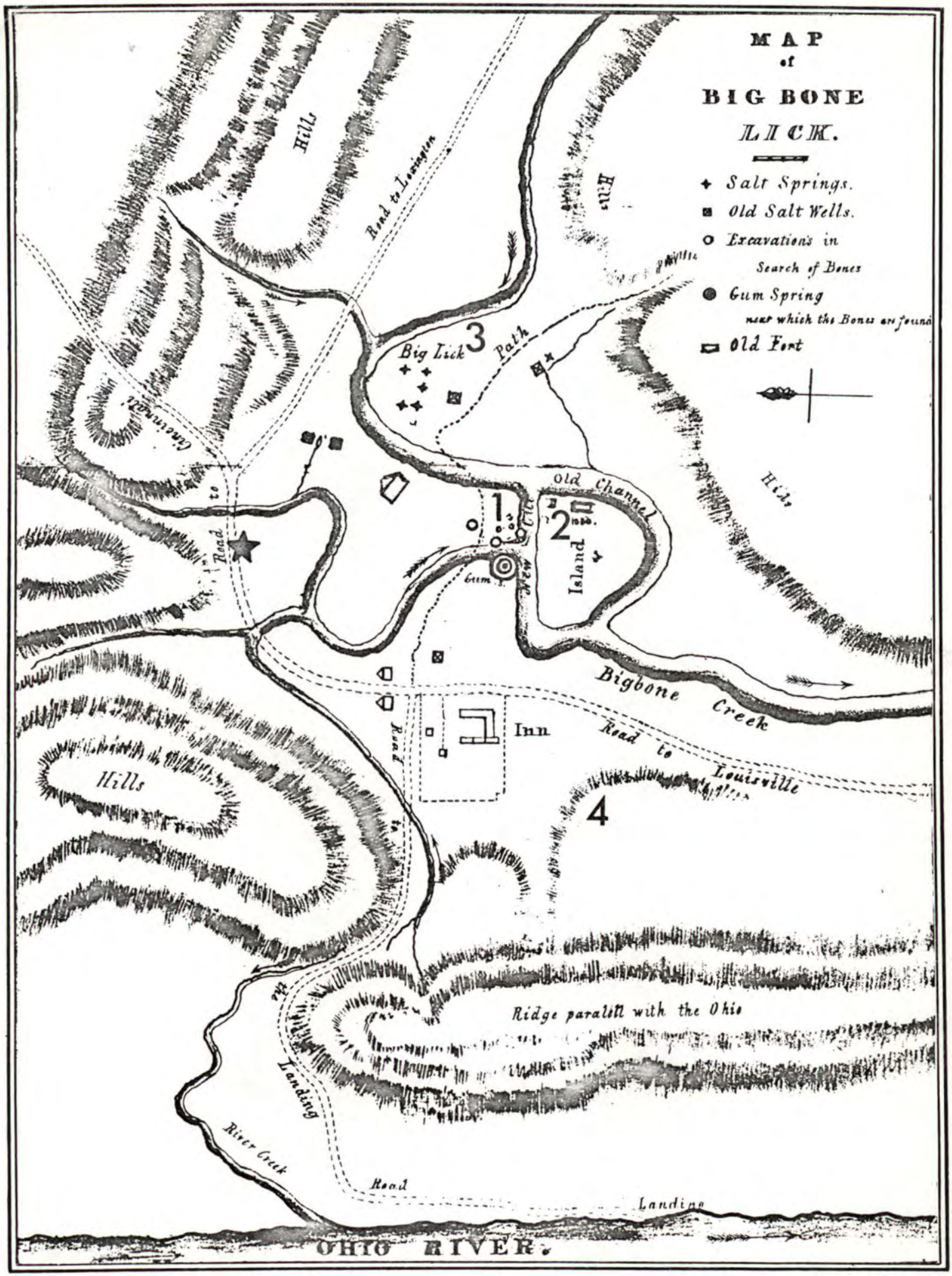
BIG BONE LICK, KENTUCKY

A Pictorial Story of the Paleontological Excavations at this Famous Fossil Locality from 1962 to 1966

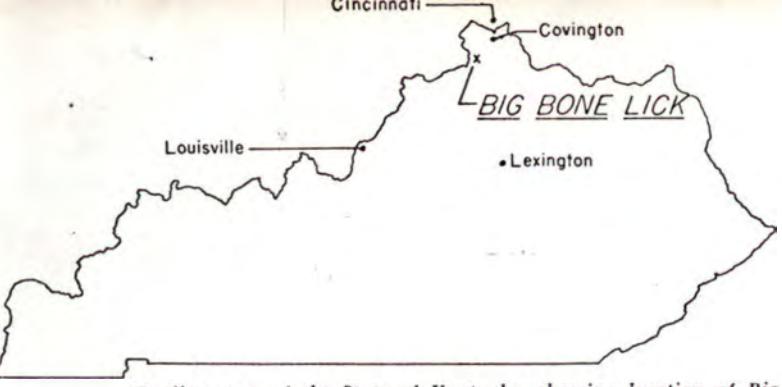
Big Bone Creek Valley in Boone County, Kentucky, looking east from Mastodon Hill. This world-famous fossil locality dates back to 1739, when the site was first discovered by early French explorers. The extensive paleontological excavations of the University of Nebraska State Museum were carried on from 1962 to 1966 in the area shown in the center of the picture. The William P. Behringer Memorial Museum, Covington, Kentucky; the Kentucky State Department of Parks; the United States Geological Survey; and the Big Bone Lick Historical Association cooperated with the Museum in this project.

Big Bone Lick was the first widely known collecting locality for vertebrate paleontology in North America. Some of the foundations for the science of vertebrate paleontology in the New World were built there at the beginning of the 19th Century. Many of the Pleistocene (Ice Age) mammals, so well known in Nebraska, were first recorded from Big Bone Lick. Still very little precise scientific information was known about this famous locality until the 1960's.

Big Bone Lick, a swampy area surrounding salt and sulfur springs, is located at the confluence of Big Bone Creek and Gum Branch in Boone County, Kentucky, some 20 miles south and west of Cincinnati, Ohio, and about two miles east of the Ohio River. This well-known fossil locality is now largely included in the Big Bone Lick State Park, which has been developed by the Commonwealth of Kentucky during the past six years.



Map of Big Bone Lick area, copied from original published in 1831 (Monthly American Journal of Geology and Natural Science, Vol. 1, No. 4). Location of present village of Big Bone is shown by the star; paleontological excavation sites of 1962–1966 are indicated by numbers 1, 2, and 3; and Mastadon Hill is designated by number 4.



Outline map of the State of Kentucky, showing location of Big Bone Lick. Over the centuries animals came here to "lick" the mud and drink the waters which contained salts and minerals. Many of the animals were trapped and their bones are a grim reminder of their fate.

The first white men to visit the Big Bone Lick area apparently were some French soldiers from Fort Niagara who were under the leadership of Major Charles LeMoyne de Longueuil,[1] the Commander of French and Indian troops in Canada. In 1739, Major Longueuil found many large bones and teeth at the edge of a marshy area and made a small collection of the fossils, some of which are still preserved in the Musée National d'Histoire Naturelle in Paris, France.

Present day Gum Spring flows through an old hollow sycamore log, which was placed there as a casing by early settlers. Gum Spring, located in center of the 1831 map to the left, is an odoriferous salt-sulfur spring, but it has attracted large mammals including man for many thousands of years. Bones of various animals have been found in abundance near the spring since 1739.

Since the days of Longueuil several large and many small collections of late Pleistocene and modern bones have been made at Big Bone Lick. Although thousands of bones were reported to have been collected in the early days, few found before 1807 have survived.

President Thomas Jefferson, one of the founders of Vertebrate Paleontology in the United States, had been interested in Big Bone Lick for many years prior to 1807. Fossil bones had been brought to him in Washington, D. C., from this fossil locality.

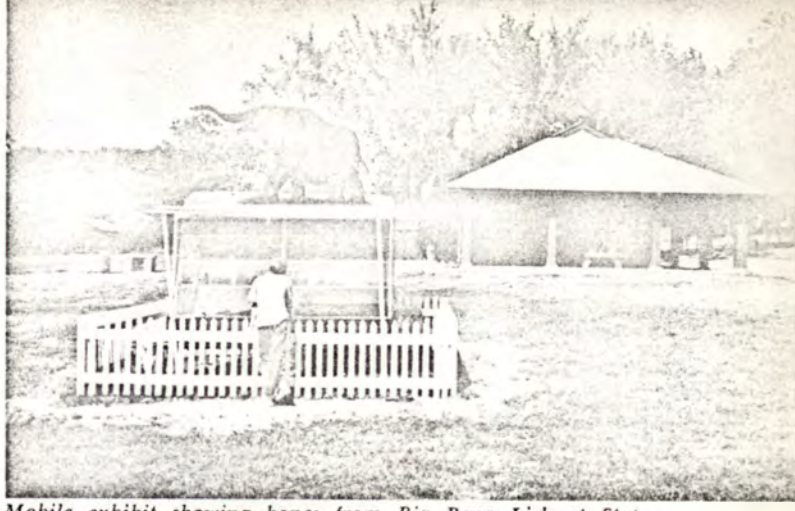
Information also had reached President Jefferson that the Indians reported that their ancestors had seen the last of the mastodons leaving Big Bone Lick going west, over a hill now known locally as Mastodon Hill. Jefferson thought that perhaps some of these mastodons and other prehistoric creatures might still be living in western United States. He had instructed Lewis and Clark in 1803 to be sure to record all of the fauna in their journals and to be especially alert to see if any of the prehistoric monsters were still alive in the Louisiana Territory. When the explorers failed to note any of these animals, President Jefferson sent William Clark with a party of ten men to Big Bone Lick to collect fossils and record the natural history of this interesting locality. The Clark-Jefferson Expedition seems to have been the first organized paleontological expedition in the New World. President Jefferson's interest in fossils had been well known for some time, and only a year prior to the sending of the expedition to Big Bone Lick young William Cullen Bryant, a critic of the President, had strongly suggested the following to Jefferson in his poem, "The Embargo": "Go, wretch, resign thy presidential chair—, where the Ohio rolls his turbid stream [go] dig for huge bones, thy glory and thy theme."

The Clark-Jefferson expedition to Big Bone Lick near the turbid Ohio River was very successful and some 300 bones were obtained and shipped to Washington. In 1808 they were installed in the White House so that President Jefferson and others could study them. For several months the collection was examined by Jefferson and Caspar Wistar, one of the foremost anatomists of that time. The collection was then divided into three parts: one for the American Philosophical Society (now preserved in the Academy of Natural Sciences of Philadelphia); one for the Musée d'Histoire Naturelle de France in Paris (still preserved in that institution); and a smaller one for the President's personal collection, which was later lost.

The Clark-Jefferson collection of bones and a few exceptionally good specimens collected and preserved by others during the early years of the 19th Century have provided the basis for most studies of the Big Bone Lick fauna. Since the time of Jefferson and prior to 1962, perhaps the largest collection made at Big Bone Lick was that of N. S. Shaler, in 1868, for the Museum of Comparative Zoology at Harvard College. Although Shaler tried to determine a strat-

[1] Longueuil is also spelled "Longueil" by some writers (Jillson, 1936, p. 1).

Historical site marker along the road at Big Bone Lick State Park. Hundreds of thousands of people visit the State Park each year.



Mobile exhibit showing bones from Big Bone Lick at State Park. Mastodon Hill is shown in distant background to the left of the exhibit.

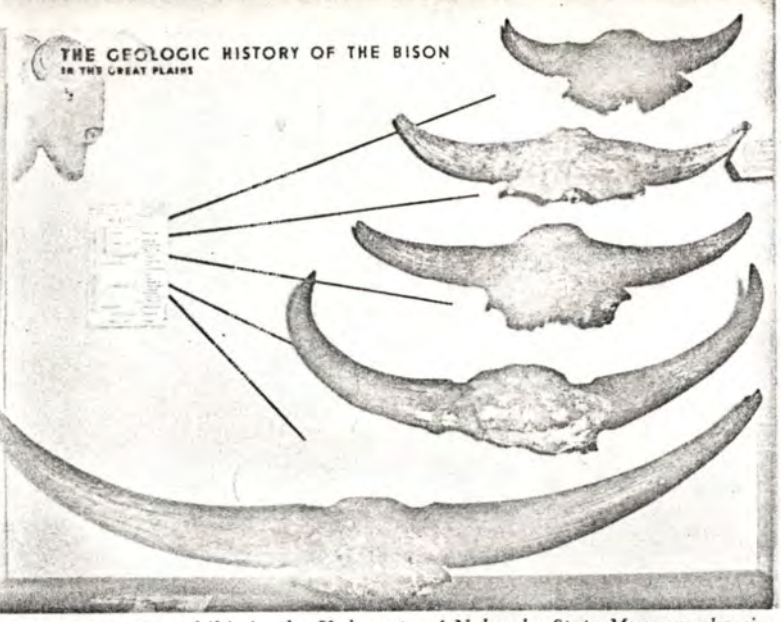
igraphic succession at the site no field records associated with the collection have been found. It appears, however, that a depth of only eight feet was reached in the excavations, and most of the bones recovered were those of the recent species of bison, *Bison bison*. In 1923 O. P. Hay, a specialist on the Pleistocene faunas of North America, reported that: "Notwithstanding the amount done at Big Bone Lick, the geology of the locality and especially of the bone-bearing levels is not well known. Most persons who have labored there were interested almost wholly in getting as many bones as possible and then in getting away." This statement still aptly summarized the state of scientific affairs at the locality until the early 1960's. The staff of the University of Nebraska State Museum became interested in Big Bone Lick in the 1930's, when it was decided that the Museum's paleontologic research program would be directed toward Late Tertiary and Quaternary mammals. In the Great Plains too, little was known of the faunal sequence of the Pleistocene (Ice Age). As the sequence was gradually worked out in the Nebraska region it became apparent that there must be many misconceptions and errors in observation concerning the association of the fossils at Big Bone Lick. Eight brief trips were made by C. Bertrand Schultz to Big Bone Lick to assess the site and to see if anything could be learned by reconnaissance or a surface study of the area, but it was so overgrown with vegetation that little could be learned. It became apparent after some test pits were dug in 1959 by Ellis Crawford of the William Behringer Museum of Covington, Kentucky, Frank C. Whitmore, Jr., of the United States Geological Survey, Washington, D. C., and Bertrand Schultz that only by extensive excavations could the geologic and paleontologic history of the area be determined with any certainty.

One of the paleontological problems that confronted the researchers was the association of the various species of bison, namely *Bison bison, Bison antiquus*, and *Bison latifrons*. All three had been reported in various publications as having been associated with each other in the same deposits at Big Bone Lick. The exact origin of the type specimens of the musk oxen (*Bootherium bombifrons*), the large ground sloth (*Mylodon harlani*), and the tapir, (*Tapirus haysii*) also was not known. The remains of other animals had been collected, but much of the information concerning the age of the bones, which had been recorded up to that time, seemed to conflict with the evidence more recently gathered in the Central Great Plains area. It seemed necessary to plan a five-year project and get it started as soon as possible. The lack of stratigraphic control at such an important collecting locality made it necessary to make new collections.

The stratigraphic history of the Big Bone Lick area, before modification by human activities during the past two centuries, corresponds very closely to that of the nearby valley of the Ohio River to which Big Bone Creek is a tributary. Although glacial tills of Kansan and Illinoian age crop out near the fossil locality, the bone-bearing deposits are entirely related to events during and subsequent to the Wisconsin glacial age. Since 1959 Louis L. Ray has been studying the geomorphology and Quaternary stratigraphy in this region of the Ohio River Valley. His studies of the adjacent Ohio Valley have been coordinated with his work at Big Bone Lick.

The first University of Nebraska field party arrived at Big Bone Lick in July of 1962. The area of Big Bone Creek and Gum Branch was mapped in the general vicinity of the bone deposits. A rod and plane table were utilized in the mapping, and a U.S. Coast and Geodetic Survey bench mark was used to establish the correct elevations.

Site No. 1, indicated on the accompanying 1831 map, was opened first in 1962. This became University of Nebraska Collecting Locality KEN-1 in the field records, and was excavated during all five years of the project. This locality is in the lower terrace of post-Tazewell age and is located directly north of Big Bone Creek and east of the mouth of Gum Branch. From the terrace surface, 10 feet above the level of Big Bone Creek, approximately 7 feet of barren surficial ma-



An exhibit in the University of Nebraska State Museum showing the development of the horn-cores of the bison since medial Pleistocene times. The skulls have gradually diminished in size since the bison first migrated to North America from Asia. The large form of bison (Bison latifrons) *at the bottom of the exhibit was first found and described from a locality near Big Bone Lick in Boone County, Kentucky. The skull next to the top of the exhibit is that of* Bison antiquus, *which was first found and described from Big Bone Lick. Modern bison skulls* (Bison bison), *similar to the one shown at the top of the display, are commonly found at Big Bone Lick, but in later deposits than those which contain the remains of* Bison antiquus. *The bones of* Bison latifrons, *the medial Pleistocene form, do not occur at Big Bone Lick.*

terial was removed by bulldozing an area 130 by 80 feet. This area then was surveyed and laid off into a grid of 10-foot squares. Excavation was begun in one square at a time, but as work progressed, several squares were excavated simultaneously. Faces of the walls or sides of the excavations were kept smooth and were photographed, sketched, and sampled. Bones, shells of invertebrate animals, plant remains, and sediment samples were collected and located by grid square number, position in square, and depth below ground surface. A description of the character of the alluvium also was recorded.

Bones at Site No. 1 were encountered at three faunal zones below the terrace surface, namely zones A, B, and C.

Zone A is a buff-brown, mottled silt layer located 7 to 8.5 feet below the surface of the terrace. This zone included evidence of the following animals: domesticated dog *(Canis familiaris),* domesticated cow *(Bos taurus),* modern bison *(Bison bison),* domesticated pig *(Sus scrofa)* white-tail deer *(Odocoileus virginianus),* and domesticated horse *(Equus caballus).* Associated with these modern native and domesticated animal bones were fragments of crockery and china, bricks, worked building stones, hand hewn wood, logs and branches of trees, seeds, and occasional reworked bones of extinct animals. It appears that some 7 to 8.5 feet of silt has been deposited into Big Bone Creek valley since the early part of the 19th Century.

Zone B is a dark gray to dark brown humic silt and sand located from 8.5 to 11 feet below the terrace surface. Bones recovered in this zone represent: modern bison *(Bison bison),* wapiti or American elk *(Cervus canadensis),* and modern deer *(Odocoileus* sp.). The fragmentary bones of the following extinct animals also were encountered in this zone, but these appear to have been derived from the underlying clayey silt and reworked by stream action: Mammoth (*Mammuthus* sp.), mastodon (*Mammut americanus*), musk ox (*Ovibos* sp. or *Bootherium* sp.) bison (*Bison* cf.*antiquus*), caribou (*Rangifer* sp.), and horse (*Equus* cf. *complicatus*). The bones of the modern bison (*B. bison*) are very abundant at this level and are associated with wood, roots, nuts, leaves, broken shells of large mollusks, and pieces of flint.

Zone C is a blue-gray sandy silt layer located from 10 to more than 15 feet below the surface of the terrace. Bones found in this zone represent: giant ground sloth (*Mylodon* sp.), mastodon (*Mammut americanus*), large bison (*Bison antiquus*), musk ox (*Bootherium* sp.), giant moose-like deer (*Cervalces scotti*), caribou (*Rangifer* sp.), and horse (*Equus* cf. *complicatus*). Not

Drilling rigs, both rotary and core types, were successfully used in 1962 by the paleontological expedition to determine the thickness of the various Pleistocene (Ice Age) deposits above the bed rock in the valley of Big Bone Creek.

Museum Notes Edition—University of Nebraska News

Published three times in January, February, September, October, and December, and twice in other months by the University of Nebraska Office of Publications, Nebraska Hall, 901 N. 17th Street, Lincoln, Nebraska 68508. Second class postage paid at Lincoln, Nebraska.

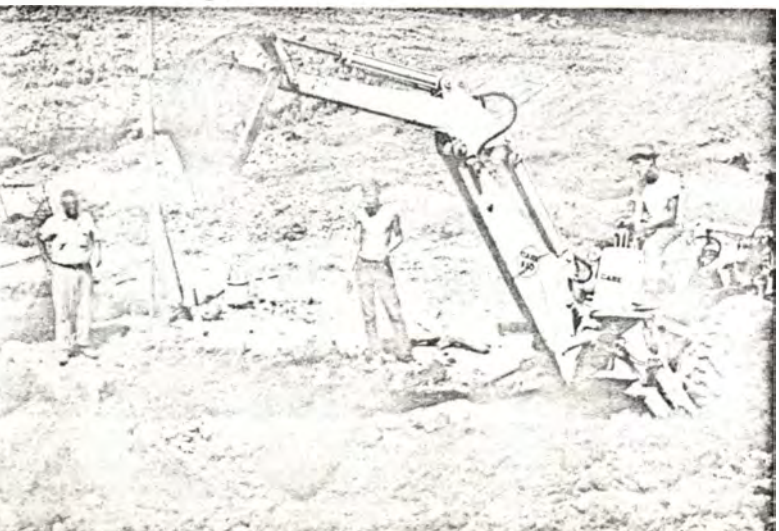
Vol. 46 Lincoln, Nebr., March 24, 1967 No. 22

Detailed contour mapping of the site was made by rod and plane table methods in 1962 before the extensive bulldozing of the sites was commenced. The bulldozers were used to remove the overburden which covered the bone layers.

all of the bones from this zone have been studied and identified. The dark greenish-gray to bluish-gray clay under Zone C contains occasional bones and extends to 29 or more feet below the terrace surface.

Site No. 2 (KEN-2) is in the higher terrace of post-Tazewell age, the surface of which is approximately 22 feet above the normal water level of Big Bone Lick, just south of Gum Spring and Site No. 1 (KEN-1). In 1962 the face of the exposure of the terrace-fill was cleared of vegetation for 80 feet along Big Bone Creek, and the site was tied into the 10-foot grid system established in Site No. 1. Some bones were excavated from the profile and the stratigraphic evidence was studied and recorded. The overburden was removed from this site in 1963 and it was worked during the summers of 1963 to 1966 inclusive. The bones occur in a single zone ranging from 12.5 to 16.6 feet below the terrace surface. The bone-bearing layer is an iron-stained, calcareous, gravelly sandy silt, 1 to 3 feet thick, which unconformably overlies a "blue" clayey silt. The faunal assemblage included the following: giant ground sloth (*Mylodon* sp.), bear (*Ursus* sp.), mastodon (*Mammut americanus*), mammoth (*Mammuthus* sp.), bison (*Bison antiquus*), musk ox (*Bootherium* sp.), giant moose-like deer (*Cervalces* sp.), deer (*Odocoileus* sp.), and horse (*Equus* cf. *complicatus*).

Backhoes were used to remove some of the overburden and also to keep the fossil quarry areas free of extensive dump piles resulting from hand excavations.

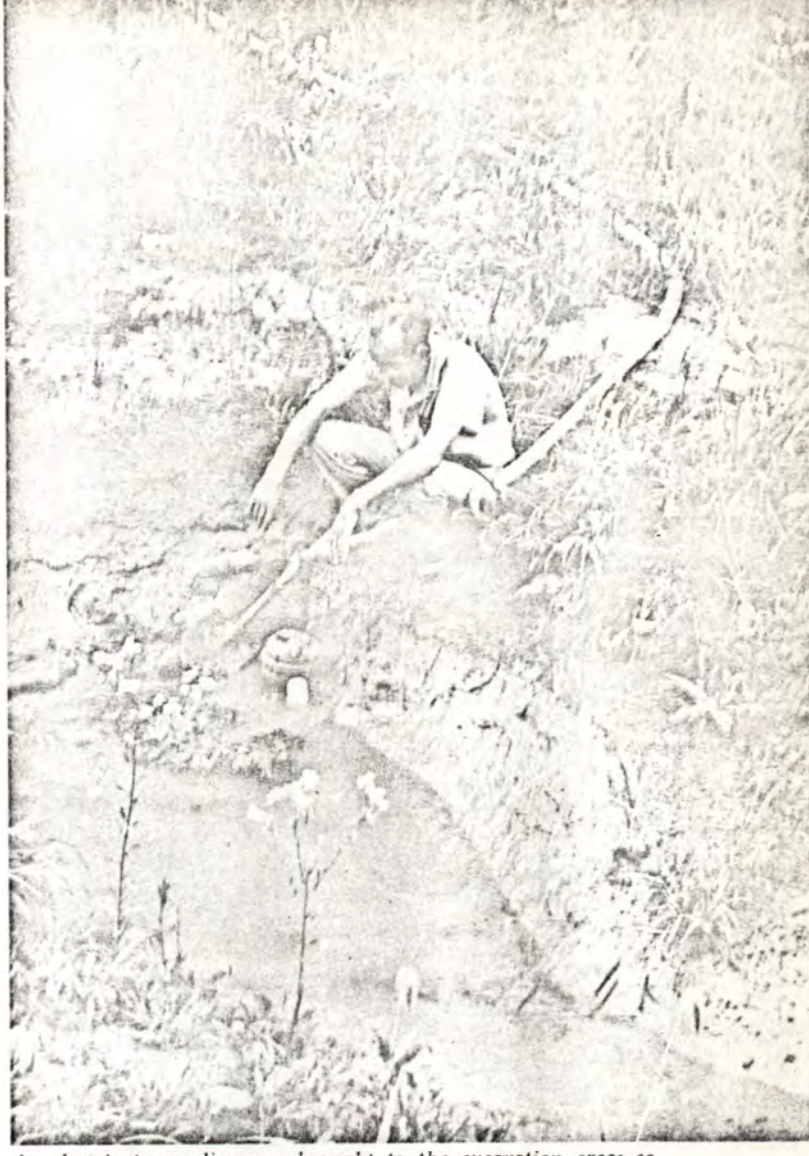


Site No. 3 (KEN-3) was opened in 1966. It was not too productive paleontologically but important geologic data were obtained. The main part of the site is an erosional remnant of the same fill as Site No. 2 (KEN-2). Near the surface and to the north and west toward the spring area ("Big Lick" springs on the 1831 map), deposits similar to the historic level in site No. 1 (KEN-1) were encountered overlapping the older deposits. An early pioneer salt works and associated historic objects were found, including a fairly well preserved hogshead (barrel) of the early 1800's.

No bones or teeth of very small mammals were found during the 1962 to 1966 excavations, although an extensive screening program was carried on each year. Several types of screens were used, including the square box types commonly used by vertebrate

Site No. 1 (shown on 1831 map), designated in records as University of Nebraska State Museum Collecting Locality KEN-1, was layed out in 10-foot squares in 1962. This grid system was later extended to include the other sites. Each specimen collected was precisely located stratigraphically and geographically in relation to the square in which it was found.

Much of the excavation at Site No. 1 was at or below water level, thus making work very difficult. Water constantly seeped into the excavation areas. Note that the bone shown in the picture below the trowel is partly submerged in water.



An electric power line was brought to the excavation areas so that a sump pump could be used to keep the water table at a low level. The excavations thus could be carried on under comparatively dry conditions, and the scientific evidence could be more readily recovered and interpreted.

paleontologists during the past ten years. The running water of Big Bone Creek between sites No. 1 and No. 2 made it convenient for the screening projects.

In addition to major excavations at Big Bone Lick numerous test holes were drilled by both rotary (auger) and core methods. The drilling equipment

Much time was spent in studying and recording the profiles exposed in the sides of each 10-foot square in Site No. 1. Precise stratigraphic records were kept for each specimen recovered. The large hoe in the picture was used to prepare the profiles for study.

Close-up view of the same profile shown in the picture to the left. Bones and wood can be seen in a former depression in an area near Gum Spring. The pick, tape, and notebook, as well as a camera, were used in obtaining and recording the geological events shown in the profile.

Cow bones and a fragment of a skull of a domesticated dog were found in 1966 preserved eight feet below the surface of the terrace in a 10-foot square in Site No. 1.

A hand hewn board was found directly below the cow and dog bones mentioned above. An old early 19th Century shoe and some old logs and limbs of trees also were found associated with the board in this square.

Modern bison bones dating back several hundreds of years were found in the stratigraphic level below historical items such as mentioned above. Various fossil bones were found in a blue-gray silt and silty clay immediately below the bison bones.

and operators were furnished by the Commonwealth of Kentucky through the Department of Parks and Department of Roads. Samples from the various stratigraphic zones in the test holes were preserved for analysis and for examination of microfauna and microflora. Wood was collected for carbon-14 analysis. Also in strategic areas where more subsurface data were needed, the backhoes were used to excavate large test holes, 4 feet wide, 6+ feet long, and some 10 feet deep. All test holes were plotted on the topographical map which was made of the area. The map, which has a scale of 1 inch to 100 feet with a 1-foot contour interval, also has all collecting localities plotted on it as well as the location of the temporary bench marks which had to be established.

The extensive field studies at the Kentucky locality, which commenced in July 1962, will be completed in June 1967, and a monographic report will be published on the results of the project. The research work at Big Bone Lick for the five year period was carried on by the staff members of the Division of Vertebrate Paleontology, University of Nebraska State Museum in cooperation with the William P. Behringer Memorial Museum, Covington, Kentucky; the Big Bone Lick Historical Association; the Kentucky State Department of Parks; and the United States Geological Survey. The principal investigators were C. Bertrand Schultz and Lloyd G. Tanner from the University of Nebraska; and the associate investigators were Frank C. Whitmore, Jr., and Louis L. Ray of the United States Geological Survey, and Ellis C. Crawford of the William P. Behringer Museum. The work for the first season was financed chiefly by the American Philosophical Society of Philadelphia, the

Screening for small bones, also for shells of snails and other invertebrates, and for seeds and nuts. The sediments associated with the larger bones at the excavation sites were examined for small fossils and other items of scientific interest. These sediments were taken from the excavation sites and put into a series of screens emersed in the flowing water of Big Bone Creek between Sites No. 1 and No. 2. The fine textured sediments gradually washed away by the moving water passing through and over the screens leaving a coarse concentrate of small pebbles, rocks, bone fragments, shells, and vegetable material. The concentrate was then dumped into the large square screens to dry. The dried material was later carefully examined for items which might be of scientific importance. The provenience of each screen load of material was carefully recorded.

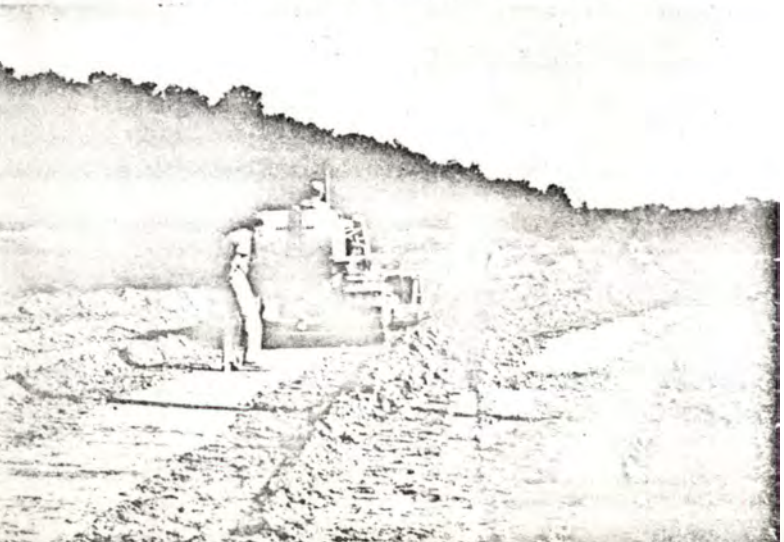
The backhoe was used to dig deep test holes below the regular bone levels in order to see how deeply the bones occurred at Site No. 1. The backhoe also was used for digging test holes at various places in Big Bone Creek valley to determine the extent of bone accumulations and stratigraphic layers.

Test hole dug with backhoe at Site No. 1 in 1966. The sides of the test hole were later smoothed down with shovels and trowels in order to study the different colors and textures of the fine grained sediments.

University of Nebraska Research Council, and the Benjamin and Rachael Maiben Paleontological Fund of the University of Nebraska Foundation. During the following four years the work was financed primarily by the National Science Foundation. Small grants for special associated investigations also were made by the University of Nebraska Foundation (Maiben Fund) and the University of Nebraska Research Council. The United States Geological Survey furnished funds to Frank C. Whitmore and Louis L. Ray for their research work. The Kentucky State Department of Parks furnished bulldozers, backhoes, and test-hole drilling equipment and some manpower

A bulldozer was used to remove the overburden at Site No. 2 (KEN-2), south of Gum Spring and Site No. 1 (KEN-1). One or more of the members of the paleontological expedition constantly followed the bulldozer to see if any historical, archaeological, or paleontological objects were encountered.

A mastodon tooth (Mammut americanus) *was found during the bulldozing operations near the surface in the historic layer. Apparently someone had found the mastodon tooth along Big Bone Creek early in the 19th Century and had left it on the high 22-foot terrace south of the creek, perhaps at the old fort which stood there. See the 1831 map for locations of the Fort and Site No. 2.*



Three of the 10-foot squares which were excavated in 1966 at Site No. 2. A tusk and a partial lower jaw of a mastodon (Mammut americanus) *are shown to the left of the nearest square just below and in front of the photographer.*

A tooth of a mammoth (Mammuthus primigenius) *and various fossil bones exposed in an iron-stained, calcareous, gravelly, sandy silt some 15 feet below the top of the terrace in Site No. 1. The tooth and the bones are more than 10,000 years old at this site.*

Site No. 3 (KEN-3) was first extensively excavated in 1966. The bulldozer in the foreground was used to remove the major portion of the overburden. The main part of the site was the same age as that of Site No. 2, *but more recent sediments were encountered just below the surface. An early pioneer salt works and associated historical objects were found. These were preserved for the Big Bone Lick State Historical Museum which will be constructed at the State Park in the near future. A fence was constructed behind the site to allow visitors to watch the excavation process without interfering with it.*

during the five years of the excavations. Roger Arnold, Superintendent of Big Bone Lick State Park, and William Fitzgerald and Bruce Ferguson of the Big Bone Lick Historical Association, Woods Miller and J. D. Moore of Big Bone, Daniel Roberts of Walton, Wallace Lucas of Florence, George Lyon of Frankfort, and numerous other persons provided help in many ways.

The various assistants which aided in the Big Bone Lick project include the following: Edward C. Black (1964-65), John W. Carson (1963), R. A. Cochran, II (1962-63), Donald Cox (1962-63), David Dahms (1965), Gary W. Dickerson (1966), Joseph W. Emmons (1965-66), Jack W. Flynn (1965-66), Ronald E. Gall (1963), Ronald Graziano (1964), Nathaniel B. Haynes (1962-64), Wayne M. Isaacs (1964), Arthur W. Johnson, graduate assistant (1965), Robert D. Luken (1964), Jonathan C. MacDowell (1966), Ronald Marquart, graduate assistant (1966), Jimmie J. Miller (1963-66), Robert E. Moore (1966), Lee J. Otte (1966), Gerald Petsche (1962), Thomas L. Piercefield (1962-63), W. H. Pile, Jr. (1962), Charles F. Piner (1965-66), Michael Ricketts (1965), Barry D. Rider (1966), Virgil Rowe (1964), Gerald Schaber, graduate assistant (1962-64), Donna Schultz (1966), Lewis R. Setters (1965), Gayle Smith (1966), Charles Tongret (1964), Susan Whitmore (1965), and Darrol C. Worstell (1962-63).

C. Bertrand Schultz
Lloyd G. Tanner
University of Nebraska State Museum

Frank C. Whitmore, Jr.
Louis L. Ray
U. S. Geological Survey

Ellis C. Crawford
William P. Behringer Memorial Museum

Selected References

Jillson, Willard Rouse. 1936. Big Bone Lick. An outline of its history, geology and paleontology to which is added an annotated bibliography of 207 titles. Big Bone Lick Assoc. Pub. No. 1: 1 Vol. Louisville, Kentucky.

Osborn, Henry Fairfield. 1935. Thomas Jefferson as a paleontologist. Science, New Series, No. 82: 533-538.

Schultz, C. Bertrand. 1943. Thomas Jefferson, Pioneer paleontologist. The Compass of Sigma Gamma Epsilon, Vol. 23, No. 4: 264-267, 1 text fig.

———. 1963. Fossil hunting, yesterday and today. Museum Notes, Univ. Nebr. State Museum, No. 22: 1-8, 7 text figs.

———. 1963. The late Pleistocene faunal sequence at Big Bone Lick, Kentucky. Amer. Phil. Soc., Year Book (Grant No. 3180 —Penrose Fund).

Schultz, C. Bertrand, Lloyd G. Tanner, Frank C. Whitmore, Jr., Louis L. Ray, Ellis C. Crawford. 1963. Paleontologic investigation at Big Bone Lick State Park, Kentucky: a preliminary report. Science, New Series, Vol. 142, No. 3596: 1167-1169, Fig. 1.

Schultz, C. Bertrand, (in collaboration with Lloyd G. Tanner, Frank C. Whitmore, Jr., Louis L. Ray, and Ellis Crawford). 1965. Big Bone Lick. Guidebook for Field Conference G, Great Lakes—Ohio River Valley, INQUA (International Association for Quaternary Research), VIIth Congress: 60-61.

Simpson, George Gaylord. 1942. The beginnings of vertebrate paleontology in North America. Proc. Amer. Phil. Soc.: Vol. 86, No. 1., 130-188, Figs. 23.

The photographs of the Big Bone Lick area used in this article were taken by the following persons: Ran Cochran (Cincinnati Inquirer), p. 11; Jerry Petsche (University of Nebraska), p. 6 (lower left), p. 7 (upper left); and C. Bertrand Schultz, p. 1, 3, 4, 5, 6 (upper left and lower right), 7 (upper right and lower left and right), 8, 9, 10.

ECK FRANK SCHRAMM

The staffs of the Museum and Department of Geology have just lost an outstanding friend and colleague. Professor Eck Frank Schramm passed away in Lincoln on February 28, 1967, at the age of 83. He was born at DeWitt, Nebraska, on September 7, 1883. On March 2 memorial services were conducted in Lincoln, Nebraska, and on the following day graveside rites were held at Newkirk, Oklahoma, where Professor Schramm had spent part of his early life. He had been associated with the Museum and Department of Geology for sixty years (1907-1967). In the fall of 1906 he came from the University of Oklahoma (A.B. 1906) to the University of Nebraska as a graduate student. Two years later he received his M.A. degree in geology, having studied chiefly under Professors Erwin H. Barbour and George E. Condra.

Professor Schramm remained in Nebraska after he had finished his graduate work. He became associated with the University of Nebraska State Museum (1908-1967), the Department of Geology (1906-1951), and the Nebraska State Geological Survey (1908-1915). He aided much in curating the various geological collections which were housed at the University. He became Professor of Geology in 1918 and Chairman of the Department in 1934. He remained in this position until his retirement in 1951.

The Museum was always of interest to Professor Schramm. He participated regularly in the geologic and vertebrate paleontology expeditions from 1908 to 1913 and in later years—until 1927—occasionally led successful field parties for the Museum. During this time he discovered vertebrate fossils which later were used as types of new species and genera. In 1941, when the Museum was reorganized, he became Curator of the newly formed Division of Geology. He continued as Curator of the Division until his retirement in 1951, when he was named Honorary Curator. His keen interest in the Museum continued until the time of his death.

During Professor Schramm's long career at the University he was always interested in students and took an active interest in various student organizations. He was a member of Kappa Sigma social fraternity, and he served for more than a quarter of a century as an advisor to the University's Interfraternity Council. Sigma Gamma Epsilon, national honorary geology fraternity, owes much to Professor Schramm for its growth. From 1932 to 1938 he served as its national Grand President. For a considerable number of years he was Editor of the "Compass," the official publication of Sigma Gamma Epsilon. He was active in Sigma Xi and the Nebraska Academy of Sciences while at the University.

One of Professor Schramm's former students, now a very successful petroleum geologist and administrator, paid the following tribute to the memory of his illustrious teacher "who did so much to train so many that they might lead a more useful life." The tribute continues, "I feel very deeply the loss of this man who had such a tremendous impact upon the formulation of my career and who implanted in me an optimistic philosophy of life. As students we all developed a life-long admiration of Professor Schramm as a man, as a teacher, as a friend and as a leader who instilled a deep sense of duty, integrity and loyalty in the mind and life of each and everyone of us. The world is truly better that he lived."

This conveys the feeling that the majority of his former students, colleagues, and other friends had of him. These admirers of Professor Schramm have established a memorial fund in his honor with the University of Nebraska Foundation. Some of the fund will be used to secure outstanding rocks and minerals for exhibit in one of the Museum's galleries, which will be named after him. The remaining portion will be used for the purchase of some special piece of equipment or some books for the Department of Geology.

Harvey L. Gunderson, Editor

A mastodon lower jaw found in an upside down position at locality KEN-3 prior to the 1962 excavations. Collections made during this time were limited to fossils which were exposed eroding out of the banks along Big Bone Creek.

Advance nomination

Big Bone Lick

BOONE

RECEIPT DATE 5/3/71

SOURCE

STATE Ky.

REGISTER NUMBER

NAT. NUMBER 2

3/11/71

1

5/4/71

RESUBMITTED 8/17/71

REVIEW

OK 9/1/71 means

HISTORIAN Historical data okay. Sarles 10/29/71

ARCHITECT -

ARCHEOLOGIST George raises enough questions to warrant sendback. Chambers 9-29-71

NPS PLANNER ~~are~~ Are map markings ok, or should we have them send enclosed in rectangle? Otherwise ok 9/3/71

KEEPER

ENTRY

CHIEF, OAHP

EDITORIAL PROCESSING, EDITOR

Date

Federal Register Entry

Annual Edition Date

Logged Card

WORKING NUMBER 8.13.70.9

COMMENTS: ~~Returned RH 7/8/71~~

- ~~full coords.~~
- ~~site description~~ (dimensions, feature, what is Baker cemetery?
- ~~area map.~~
- date, ~~tribal associations~~
- acreage - ~~full state park?~~

CONGRESSIONAL

PLEASE RETURN THIS FORM WHEN THE PROPERTY IS RESUBMITTED. DATE July 1, 1971

NAME OF PROPERTY Big Bone Lick

The attached National Register Inventory-Nomination form is being returned to your office for clarification of the information indicated below.

RECEIVED
JUL 12 1971
KY. PROGRAM DEVELOPMENT OFFICE

✓ Insufficient locational information.
Comments:

✓ Geographical location codes missing or incorrect.

✓ Classification (Item#3) incomplete.
Comments:

✓ Owner of property/location of legal description necessary.
Comments:

✓ No bibliography.

Acreage of nomination not provided.
Comments: 2 lines

XXX Longitude and latitude coordinates.
Comments: Please compute coordinates in degrees, minutes and seconds.

✓ Form is not signed by the State Liaison Officer (Item #12).

Photograph/map forms (Form 10-301) required for each photograph/map.

Insufficient map coverage of property.
Comments: 2 lines

XXX Description (Item #7).
Comments: Please provide a description of the site, including dimensions of area of significance and explanation of features within the bounds of the nomination which are to be preserved and protected by National Register status. For example, what is the relationship of Baker Cemetery (shown on the map) to the nomination?

XXX Statement of Significance (Item #8).
Comments: What approximate dates and tribal associations can be linked with the Indians who frequented the site in the past? Do any structures remain associated with the site's period as a health spa and resort?

✓ ~~Xerox~~ chemical copies forms unacceptable.

XXX Other.
Comments: The acreage for the nomination is given as 248. This, we assume, is the extent of the State Park. We question whether this acreage is necessary for the protection of the historical resources of the nomination. (National Register entries should be limited to the acreage of the actual historic site plus appropriate protective buffer.) This acreage may be necessary in this instance, but if so we ask that it be supported in the form. It would appear

(over)

Clarification or correction of the items noted above must be made prior to the initiation of our professional review. Correction of these technical errors or deficiencies does not necessarily insure that the nomination will then satisfy National Register criteria in full.

SIGNED Tom Mantzke

that the site may contain resources associated with a number of periods and cultures, from the prehistoric through the 19th century. It would be helpful to have an area map (hand drawn acceptable) as a supplement indicating the locations of individual significant features within the site, especially if these range over an area of 200 acres or more.

Advance Nomination

PROPERTY Big Bone Lick STATE Ky. Boone

DATE OF RECEIPT 12/7/71 YES NO NUMBER REGISTER: 71.3.21.0007

DATA PAGE
PHOTO (S) 2 3/11/71
PHOTO DESCRIPTION (S)
MAP (S) 3
MAP DESCRIPTION (S)
LOGGED 8/16/72
ACKNOWLEDGE 12/7/71
RESUBMIT RESUBMITTED

71000339

REVIEW ORIGINALLY SUBMITTED AUG 17. 1971 OK Means 5/10/72

HISTORIAN Okay. Sanders 4/11/72

ARCHEOLOGIST 5/9/72 → OK Peterson 9/5/72

ARCHITECT OK Chambers 2-3-72

ASST. KEEPER OK Mullen 5/24/72

KEEPER Lon 6/5

WRITER/EDITOR OK Marcus 2/8/72

CHIEF, OAHP

EDITORIAL PROCESSING, EDITOR

Federal Registry Entry Annual Edition Entry

LOGGED CARD

COMMENTS: WORKING NUMBER 8.13.70.7 ~~12-7-71~~

CONGRESSIONAL DIST.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF KENTUCKY
KENTUCKY GEOLOGICAL SURVEY
UNIVERSITY OF KENTUCKY

RISING SUN QUADRANGLE
KENTUCKY—INDIANA
7.5 MINUTE SERIES (TOPOGRAPHIC)
NE/4 RISING SUN QUADRANGLE

4082 III SW (AURORA)
4062 III SE (LAWRENCEBURG)
4062 II SW (BURLINGTON)
4061 IV NW (ABERDEEN)
4061 I NW (UNION)
4061 IV SW (FLORENCE)
4026 I SW (VERONA)

AURORA 4.6 MI.
COVINGTON 29 MI.
PETERSBURG 6 MI.
BURLINGTON 6 MI.
COFIELD CORNER 8 MI.
DILLSBORO 13 MI.
COFIELD CORNER 6 MI.
VEVAY (VIA IND. 56) 29 MI.
ABERDEEN 8 MI.
1.2 MI. TO IND. 56
UNION 4.1 MI.
3 MI. TO U.S. 42 & 127
6 MI. TO INTERSTATE 75
PATRIOT 3.5 MI.
VEVAY 22 MI.

84°52′30″ 39°00′ 730 000 FEET (IND.) 685000m.E. R. 1 W. 50′ 1 850 000 FEET (KY.) 47′30″ 84°45′ 39°00′
4318000m.N. 540 000 FEET (IND.) 540 000 FEET (KY.) 57′30″ 55′ 510 000 FEET (KY.) 510 000 FEET (IND.) 38°52′30″
4306000m.N.
830 000 FEET (KY.) 760 000 FEET (IND.) 694000m.E.

Henschen Hill
Camp Shor
Mile 502
Lighthouse Island
Sand and Gravel Pit
Rice Cem
BM 519
Cem
Belleview (Grant PO)
BM 509
BM 504 WT
McVille
Rice Cem
Grant Cem
Powell Hill
Sand and Gravel Pit
La Grange Cem
Sand and Gravel Pit
BM 462
Light
Marshall Cem
Waterloo
Waterloo Ch
Beech Grove Ch
Cem
Pope Cem
Acra Cem
Middle Creek Road
Middle Creek
Island Branch
Powell Hill Road
Buck Run
Boone Co Ohio Co
Indiana Kentucky
Middle Creek
Pope Creek Road
East Bend Road
Ryle Road
Holton Road
Rising Sun Cem
Rising Sun Airport
Park
Cedar Hedge Cem
Rising Sun (BM 519)
Sewage Disposal
Mile 505
Lower River 486
BM 504
Pearson Cem
Craig Cem
Wilson Cem
BM 480
BM 474
Rabbit Hash
Arnold Creek
Normal Pool Elev 455
BM 470
Stephens Cem
BM 474
Lick Creek
Ryle Cem
Gunpowder Creek
Riddles Run
Pope Creek Road
Riddles Run
Setters Creek Road
Big Bone Church
Cem
East Bend Ch
BM 533
BM 534
Upper East Bend Bottom
Under Construction
BM 490
Kirtley Cem
BM 497
Craig Cem
Lower East Bend Bottom
Cem
Gregory Cem
Hamilton Sch
BM 471
BM 486
Landing
Big Bone Branch
Pipeline
Big Bone
BM 490
BM 476
Spring
Big Bone Lick State Park
Creek
Bender Rd
Bull Run
North Landing
Ohio R.
Mile 510
Light
Grants Cr
Boone Co
Switzerland Co
Kentucky
Indiana
Light
BM 442
BM 486
Fourth Wink Creek
Meadow Ridge
Ridge
Mexico Bottom
Hamilton
Light
Mile 515
BM 514
BM 456
Huff Rd
Long Br
Posey
Randolph
Ohio River
First Principal Meridian
R. 1 W.
R. 1 E.
T. 4 N.
T. 3 N.

Mapped, edited, and published by the Geological Survey
Indiana area mapped in cooperation with
State of Indiana Department of Conservation
Control by USGS, USC&GS, and USCE
Topography in Kentucky by photogrammetric methods from aerial photographs taken 1949. Field checked 1951. Topography in Indiana by planetable surveys 1940. Revised 1961
Polyconic projection. 1927 North American datum
10,000-foot grids based on Kentucky coordinate system, north zone and Indiana coordinate system, east zone
1000-meter Universal Transverse Mercator grid ticks, zone 16, shown in blue
Fine red dashed lines indicate selected fence and field lines where generally visible on aerial photographs. This information is unchecked
The state boundary as shown represents the approximate position of the low waterline as determined from U. S. Corps of Engineers Ohio River charts, surveyed 1911–1914, and supplementary information

MN GN
½° 9 MILS 1°22′ 24 MILS
UTM GRID AND 1961 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000
1 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETER
CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, WASHINGTON 25, D. C.,
KENTUCKY GEOLOGICAL SURVEY, LEXINGTON, KENTUCKY
KENTUCKY DEPARTMENT OF COMMERCE, FRANKFORT, KENTUCKY
AND INDIANA DEPARTMENT OF CONSERVATION, INDIANAPOLIS, INDIANA
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ROAD CLASSIFICATION
Medium-duty Light-duty
Unimproved dirt
State Route

KENTUCKY
QUADRANGLE LOCATION

UTM
NE 16/695060/4306630
SE 16/694920/4306060
SW 16/694520/4306130
NW 16/694600/4306510

CD

RISING SUN, KY.—IND.
NE/4 RISING SUN QUADRANGLE
N3852.5—W8445/7.5
1961
AMS 4061 IV NE—SERIES V853

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—1963

695

Big Bone Lick
Boone Ky

SMarusin 3/5/71

MAR 11 1971

H30-HR

Mr. Frank J. Groschelle
Administrator, Kentucky Program Development
Office
Coordinator of State & Federal Activities
Office of the Governor
Room 157, Capitol Building
Frankfort, Kentucky 40601

Dear Mr. Groschelle:

We are pleased to inform you that the historic properties listed on the enclosure have been placed on the National Register of Historic Places. Senators John Sherman Cooper and Marlow W. Cook and the appropriate Representatives are being informed. A leaflet explaining the National Register is enclosed for each of the property owners. Please withhold any publicity on this until you have received a carbon copy of the Congressional correspondence.

Sincerely yours,

(Signed)

Director

Enclosures

Entered in the National Register MAR 11 1971

cc:

HR

SMarusin:mm 3/4/71 BASIC FILE RETAINED IN HR

7

SMarusin 3/5/71

MAR 11 1971

H30-HR

Director, Southeast Region

HR
SMarusin:mm 3/4/71

House of Representatives
Hon. John C. Watts
Hon. William H. Natcher
Hon. Romano L. Mazzoli
Hon. M. G. (Gene) Snyder

United States Senate
Hon. Marlow W. Cook

BASIC FILE RETAINED IN HR

Also notified:

Hon. John Sherman Cooper
United States Senate
Washington, D. C.

Dear Senator Cooper:

We are pleased to inform you that the historic properties listed on the enclosure have been nominated by the State Liaison Officer appointed by the Governor for the implementation of the National Historic Preservation Program in Kentucky and have been entered into the National Register of Historic Places. Senator Marlow W. Cook and the appropriate Representatives have also been provided with this information. By copy of this letter, the State Liaison Officer, Mr. Frank J. Groschelle, Administrator, Kentucky Program Development Office, Coordinator of State & Federal Activities, Office of the Governor, Room 157, Capitol Building, Frankfort, Kentucky 40601, has likewise been notified. A leaflet explaining the National Register is enclosed.

Sincerely yours,

Signed)

Director

Enclosures

Entered in the National Register MAR 11 1971

cc: Mr. Frank J. Groschelle, Administrator, Kentucky Program Development Office, Coordinator of State & Federal Activities, Office of the Governor, Room 157, Capitol Building, Frankfort, Kentucky 40601

Properties added to the National Register of Historic Places

KENTUCKY

Old State House	Franklin County, Kentucky
Lieutenant Governor's Mansion	Franklin County, Kentucky
White Hall	Madison County, Kentucky
Federal Hill	Nelson County, Kentucky
Henry Clay Law Office	Fayette County, Kentucky
Locust Grove	Jefferson County, Kentucky
Big Bone Lick	Boone County, Kentucky
Corner in Celebrities	Franklin County, Kentucky

File 3-11-71
Boone Co., Ky.

H34-HA

April 13, 1971

AIRMAIL

Dr. Thomas B. Angel, Jr., D.V.M.
Chairman, Boone County Planning
Commission
Florence City Building
7431 U.S. 42
Florence, Kentucky 41042

Dear Dr. Angel:

Mr. Gibbs has referred your letter concerning the problem of the powerline crossing Big Bone Lick State Park to this office.

Since Big Bone Lick has been entered on the National Register of Historic Places it would appear that the powerline project comes within the jurisdiction of the National Historic Preservation Act of 1966 (80 Stat. 915) which requires the head of any Federal agency licensing or assisting a project having an adverse effect on a property listed in the National Register to consult with the State Liaison Officer of the State involved and with the Office of Archeology and Historic Preservation in accordance with procedures published in the Federal Register, copy of which is enclosed.

The Historic Preservation Officer for Kentucky is Mr. Joseph M. Gray, Administrator, Kentucky Program Development Offices, Coordinator of State and Federal Activities, Office of the Governor, Room 157, Capitol Building, Frankfort, Kentucky 40601.

We suggest that you immediately inform the power company of the necessity to consult with the parties mentioned to attempt a resolution as a means of avoiding the necessity for the affecting agency to bring the problem to the attention of the Advisory Council on Historic Preservation for comment as required by law.

Sincerely yours,

/s/ John M. Corbett

John M. Corbett
Chief Archeologist

Enclosure

cc:
Mr. Robert F. Gibbs, Project Coordinator, U.S. Dept. of the Interior, Off. of the Secretary, South Florida Environmental Project, 75 Va. Beach Drive, Miami, Fla. 33149

BASIC FILE RETAINED IN HA

HR
HA

cc: Dir., Southeast Region
Mr. Clark, MO(A)

ZABradley:jjc:4/13/71

(502) 564-3605

Kentucky
Program Development Office
The Capitol
Frankfort, Kentucky 40601

Louie B. Nunn
Governor

April 27, 1971

Dr. William J. Murtagh
Keeper of the National Register
National Park Service
U.S. Department of the Interior
801 Nineteenth Street, N.W.
Washington, D. C. 20006

Dear Dr. Murtagh:

I am enclosing National Register Inventory-Nomination Forms for seven (7) State-owned historic places in the Commonwealth of Kentucky, entered on the Register, March 11, 1971, as advance nominations.

Complete documentation is provided for the following properties:

1. Old State House
2. Lieutenant Governor's Mansion
3. Whitehall
4. Federal Hill (My Old Kentucky Home)
5. Henry Clay Law Office
6. Locust Grove
7. Big Bone Lick

I am also recommending upon unanimous approval of the Kentucky Historic Preservation Review Board, the Riverside Drive Historic District in Covington, Kentucky, located in Kenton County, for entry on the National Register of Historic Places. For that nomination you will find attached copies of:

1. Form 10-300
2. Form 10-301

I would appreciate an early and favorable approval of this additional information.

Very truly yours,

Joseph M. Gray
Administrator

(502) 564-3605

Kentucky
Program Development Office
The Capitol
Frankfort, Kentucky 40601

Louie B. Nunn
Governor

August 11, 1971

Dr. William J. Murtagh, Keeper
National Register of Historic Places
United States Department of the Interior
National Park Service
801 Nineteenth Street, N.W.
Washington, D. C. 20006

Dear Dr. Murtagh:

I am pleased to transmit the National Register Nomination Forms for Big Bone Lick which have been revised by the staff of the Kentucky Department of Parks. You will note the information provided in Area Number 7, "Description," and Area Number 8, "Statement of Significance," as well as revised "Geographical Data," Number 10.

I trust this information is sufficient and that Big Bone Lick can now be officially listed on the Register.

Sincerely yours,

JOSEPH M. GRAY
Administrator

Enclosures

H34-HR

NOV 8 1971

Mr. Joseph M. Gray
Administrator, Kentucky Program
Development Office
Coordinator of State & Federal Activities
Office of the Governor
Room 157, Capitol Building
Frankfort, Kentucky 40601

Dear Mr. Gray:

We are in the process of reviewing your advance nomination of Big Bone Lick to the National Register. Several matters are unclear to our professional staff and we hope you can clarify them for us.

The two maps do not seem to agree, making boundary determinations difficult. For example, the park map shows the old and later hotel locations circled in red. Neither one would be within the boundaries shown on the 7.5 minute USGS quadrangle, so we assume they are not being added to the park. Also, the cemetery (mentioned in the description section of the nomination form) is apparently not within the penciled boundaries, judging by the location given in the park map. Is this true, or an oversight?

In the descriptive section, the paleontological remains are referred to as dating from the Pleistocene epoch. In the same paragraph is a reference to artifacts (objects made or used by man). Do you actually mean bones or fossils? Our archeologist points out that there is relatively little definite evidence of man in the New World during the Pleistocene.

In the section on geographical location, your latitude-longitude coordinates are reversed. This may seem trivial now, but when

this geographic data is eventually computerized, the problem will be greatly magnified.

Upon receipt of the requested clarifications, we shall process your nomination as soon as possible.

Sincerely yours,

Robert J. Mullen
Chief, Branch of
Registration

Enclosures

cc:
Director, Southeast Region w-cy/inc.
I
HR-w-cy/inc.

MCMeans:cm 11/3/71 BASIC FILE RETAINED IN HR

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF PARKS
STATE OFFICE BLDG. ANNEX, FRANKFORT, KENTUCKY 40601. PHONE 564-4260 (AREA CODE 502)

LOUIE B. NUNN
GOVERNOR

S. W. PALMER-BALL
COMMISSIONER

November 24, 1971

Mr. Robert J. Mullen
Chief
Branch of Registration
United States Department of Interior
National Park Service
801 19th. Street N.W.
Washington, D.C. 20006

Dear Mr. Mullen;

I have reviewed the nomination of Big Bone Lick to the National Register and would like to clarify some of the statements.

The site of the first hotel is included in the quadrangle as proposed. The site of the second hotel is outside the quadrangle. The first hotel is one of significance as it is the site which brought prominence to the area as a health and mineral water resort. The second site was mentioned in order to complete the history of Big Bone Lick as a resort and as stated before there are no remains of this structure. Therefore, we see no advantage to enlarging the quadrangle to include this site.

The cemetery was mentioned in answer to previous inquiries. It has no relationship to the historical significance emphasized in the nomination. It is not within the boundaries of the nominated acreage and can be deleted from the nomination.

The reference to artifacts was an oversight and should be changed to "bones and fossils".

The latitude and longitude coordinates have been corrected as your letter to Mr. Joseph M. Gray suggested.

With this clarification, I hope the nomination will be approved and that final processing can be completed.

Sincerely,
Kathy Lambert
Kathy Lambert, Assistant Curator

EVERY KENTUCKIAN COUNTS

(502) 564-3605

Kentucky
Program Development Office
The Capitol
Frankfort, Kentucky 40601

Louie B. Nunn
Governor

December 3, 1971

Dr. William J. Murtagh, Keeper
National Register of Historic Places
U. S. Department of the Interior
National Park Service
801 Nineteenth Street, N. W.
Washington, D. C. 20006

Dear Dr. Murtagh:

I am returning the National Register Nomination Forms for Big Bone Lick. All suggested corrections to clarify the professional staff members' determinations have been made.

We will certainly appreciate immediate processing of the nomination.

Sincerely yours,

Joseph M. Gray
Administrator

cc: Charles Parrish

KENTUCKY FEDERATION OF WOMEN'S CLUBS
State Headquarters, 1228 Cherokee Road, Louisville, Kentucky 40204

PRESIDENT
Mrs. Harold Mullins

August 11, 1972
Dry Ridge, Ky. 41035

Action Office JW
For info only

Hon. Rogers Morton, Secretary
Department of the Interior
United States of America
Washington, D. C.

Dear Sir:

As Cultural Heritage Chairman of the Kentucky Federation of Women's Clubs, it has been called to my attention by club women of eight counties of Northern Kentucky, that Big Bone Lick Park is in imminent danger of becoming simply a recreational area for such activities as camping, boating and other sports. Our members are apprehensive that the historic background and importance will be smothered and lost forever.

We understand that the area has been designated a Historical Site but the members are deeply cognizant of the fact that it was here that the first white woman, Mary Inglis, was brought in 1756 as captive of the Shawnees to help them produce salt. She cleverly escaped with an old Dutch woman and, after forty days of heroic travel up the Ohio and Big Sandy Rivers, reached her home and saved the ill companion.

The club women are also aware that the historic remains of mammoths, artic elephants and other prehistoric animals were removed from Big Bone to Pennsylvania, England, France and, through Thomas Jefferson's interest, even to the White House. More recent diggings were taken to the University of Nebraska because of the fact that no Museum was located at the Licks for their permanent display. A suitable Museum at Big Bone Licks is highly desired.

As Secretary of the Interior, and because of your inherent interest in Kentucky and preservation of the Nation's historic sites, will you please advise us of the procedure necessary to obtain the designation of Big Bone Licks as a National Monument? We would also like to have your thoughts, and perhaps official help, in securing the return to Big Bone of the items removed during various finds and diggings which are now in museums or storage places where they have little value and are unable to be viewed by our citizens.

Mrs. Joseph C. Evans, immediate past president of KFWC, is now serving the General Federation of Women's Clubs as Chairman of

Cultural Heritage. She will be in Washington from September 10 to 14 attending the Federation Board Meeting. She would be happy, if agreeable to you, to call at your office to discuss with you the feasibility of the project and your suggested procedure.

An expression of your interest will be greatly appreciated.

Sincerely yours,

Mrs. T. Hume

Chairman, Cultural Heritage
Kentucky Federation of Women's Clubs

Addresses:

Mrs. Robert Hume
Box 2, Dry Ridge, Ky. 41035

Mrs. Joseph C. Evans
281 Taylor Drive
Lexington, Ky. 40505

Blue Envelope
Rec'd 8/24

August 21, 1972

Dear Mrs. Hume:

Secretary Morton has asked me to contact you regarding your interest in designating Big Bone Lick Park as a National Monument.

I shall be pleased to meet with Mrs. Evans per your suggestion when she is in Washington this September.

Sincerely yours,

Richard C. Curry
Special Assistant to the
Assistant Secretary for
Fish & Wildlife & Parks

Mrs. Robert Hume
Box 2
Dry Ridge, Kentucky 41035

cc:
RCC Chron.
Secy's Reading
Secy's File
Subject

RCCurry:kg:8-21-72

Dr. Connally w/c of inc.

August 21, 1972

Dear Mrs. Evans:

In her letter of August 18th to Secretary Morton regarding Big Bone Lick Park, Mrs. Hume suggested that you would be in Washington September 10-14 and would like to discuss this area.

I would be delighted to meet with you at this time and to outline the procedures for establishing a National Monument.

I suggest that you call me at (202) 343-5897 on Monday, September 11th so that we can arrange an appointment that is compatible with your other committments.

Sincerely yours,

Richard C. Curry
Special Assistant to the
Assistant Secretary for
Fish & Wildlife & Parks

Mrs. Joseph C. Evans
281 Taylor Drive
Lexington, Kentucky 40505

cc:
Dr. Curry's Chron
Secy's Reading File (2)
Secy's File
Subject

RCCurry:kg:8-21-72

Dr. Connolly w/c of inc.

September 8, 1972

Memorandum

To: Richard C. Curry
Special Assistant to the Assistant Secretary for
Fish & Wildlife & Parks

From: Associate Director, Professional Services

Subject: Big Bone Lick Park

During the week of September 11 I shall be participating in the Rome Centre Conference in Williamsburg and Philadelphia. Therefore, I regret that I shall be unable to join you when Mrs. Joseph C. Evans of Lexington, Kentucky comes to discuss her interest in establishing Big Bone Lick Park as a National Monument.

However, Mr. Robert M. Utley, Director of the Office of Archeology and Historic Preservation (ext. 7550) will be Acting Associate Director, Professional Services in my absence. He will be able to join you on my behalf and would appreciate being consulted regarding the time of the appointment when Mrs. Evans calls, since he will be involved in several hearings during the week of September 11.

Ernest Allen Connally

Ernest Allen Connally

cc:
PH-Mr. Utley
P
Director's reading file

EAConnally:eh

Ky. - Big Bone Lick State Park

State Journal
Nov. 16, 1966
p. 5

Prehistoric Giant Statues Mulled

State officials have introduced a plan that would decorate Big Bone Lick State Park with statues of prehistoric giants.

Gov. Edward T. Breathitt and Parks Commissioner Robert D. Bell presented the plan Monday at a meeting here with Boone County residents.

The plan seeks to capitalize on what planners call "the real significance" of the area-the existence of centuries-old fossil remains of these prehistoric animals.

The plan also calls for a museum of natural history to explain "the mystery of the disappearing fauna following the last ice age more than 10,000 years ago." No detailed plans of the museum were presented.

Bell would not estimate the cost of the displays, or when they would be completed.

Ky.-Big Bone Lick State Park

DEPARTMENT OF PUBLIC INFORMATION
CAPITOL ANNEX-FRANKFORT, KENTUCKY 40601—AREA CODE 502 564-4930
TRAVEL DIVISION

KENTUCKY'S BIG BONE LICK HAS BONES TO PICK

A select group of American scientists are boning up on their Ice Age history at Big Bone Lick State Park near Covington, Ky. this summer.

A 5-year excavation project headed by the University of Nebraska, and participated in by the United States Geological Survey at Washington and Ellis Crawford of the Behringer Museum at Covington, Ky. is entering its 5th summer of unearthing Ice Age skeletal remains.

Park visitors are not allowed at the digging sites while the scientists are working, but free guided tours are conducted on Sundays during August. A small trailer museum next to the shelter house in the park has many of the recovered bones on display. Currently being planned is a permanent park museum to display specimens of the bones retrieved during the 5-year dig.

The mammoths, mastodons and other prehistoric creatures whose bones are now being removed from the Big Bone excavation site, were drawn to the area by the salt springs and trapped when their heavy bodies mired into the bogs around the springs.

The scientists will pack up their shovels and head for home the 1st of September, but Big Bone Lick State Park will remain open the entire year.

The 175-acre park is a popular spot for picnickers and sightseers and is located about 15 miles southwest of Covington on Ky-338. A new road runs from the park to a boat launching site on the Ohio River. There is no admission charge to the park.

# # #

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The Courier-Journal

Prehistoric bones may get home a

By ANNE PARDUE
Courier-Journal Staff Writer

FRANKFORT, Ky.—If you want to view bones of prehistoric animals that once roamed through Boone County in Northern Kentucky, just be patient.

Their future home will be a specially built museum that local residents want constructed, or an old barn that the state Parks Department wants to renovate for display of bones unearthed on the property during the 1960s.

The bones now are in boxes at the University of Nebraska State Museum at Lincoln. Dr. C. Bertrand Schultz, director of the museum, was also in charge of the team that spent five summers of scientific expedition at Big Bone Lick State Park.

Dr. Schultz said during a telephone interview that the bones are important from a scientific viewpoint, since the area is where "vertebrate paleontology had its birth."

Bones found in the area represent the ancient mastadon, bison, sloth, mammoth and horse which watered at the salt lick thousands of years ago.

Dr. Schultz said the state of Kentucky invited the team to conduct the expedition. The project was financed by out-of-state groups, including the American Philosophical Society of Philadelphia and the National Science Foundation. The state provided equipment for the excavating.

There was an agreement that the bones, or some of them, would be returned from Nebraska to Big Bone Lick when a museum with adequate security arrangements is available, Dr. Schultz said.

An added attraction to the display would be prehistoric bones from the area that once belonged to Thomas Jefferson, Dr. Schultz said. They now are at the American Philosophical Society in Philadelphia.

State Parks Commissioner Ewart Johnson said his department would not be involved in building a new museum. Instead, he proposes that his department restore an old barn to "make it look prehistoric" to display the bones.

"When we get through, we want people to know why they are there," Johnson said.

The commissioner also has criticized the previous state administration for overpromoting and overpromising facilities

Ky.-Big Bone Lick
State Park

MONDAY, M[illegible] 15, 1972
S[illegible]TION B

at Big Bone Lick

for at least two parks, including Big Bone Lick.

He said Big Bone Lick has the least occupancy rate of any campground—"about 18 per cent"—and people won't stay in an area if there's nothing to attract them. "That's exactly what happened to Big Bone," he said.

A planned boat marina at Big Bone Lick will be dropped because it is too difficult to construct and probably would not pay its way, Johnson said.

Big Bone Lick became a part of the state park system in 1960.

Among Boone Countians who have pushed for historical, as well as recreational, development is former State Rep. Dan Roberts of Walton.

Roberts, now a community services representative of the Department of Commerce, says the area has enough population "to support a first-class park."

There are campsites there now, and the state proposes to build a swimming pool.

Big Bone Lick was once a famous resort center with hotels catering to persons seeking mineral waters. During pioneer days it was a source of salt for the settlers. Its name comes from the bones of many huge prehistoric animals unearthed in the area.

Ky. - Big Bone Lick State Park

Courier Journal
Nov. 15, 1966
P. B. 1

Statues at Big Bone Lick

A 'Monster' Plan for Park

By WILLIAM BRADFORD

FRANKFORT, Ky. (AP)—State plans to add a touch of a prehistoric era to Big Bone Lick State Park were endorsed enthusiastically yesterday by citizens of Boone County, where the park is located.

Gov. Edward T. Breathitt and Parks Commissioner Robert D. Bell presented a master plan for development of the park at a meeting here with 16 Boone County residents.

Highlighting the plan was a suggestion for interspersing in the park full-size statues of giant sloths, mastodons and other animals "unique to the area." A statue of a trumpeting mastodon would greet visitors at the entrance to the park, according to the plan.

One of the outdoor displays would show a herd of giant buffalo being stalked by an Indian under a buffalo skin. Another would have a herd of mastodon beside a lagoon for living animals.

This concept of the parks seeks to capitalize on what planners call "the real significance of the area—the existence of centuries-old fossil remains of these prehistoric animals.

Museum Is Planned

The master plan also calls for a Museum of Natural History to explain "the mystery of the disappearing fauna following the last ice age, more than 10,000 years ago." No detailed plans for the museum were presented.

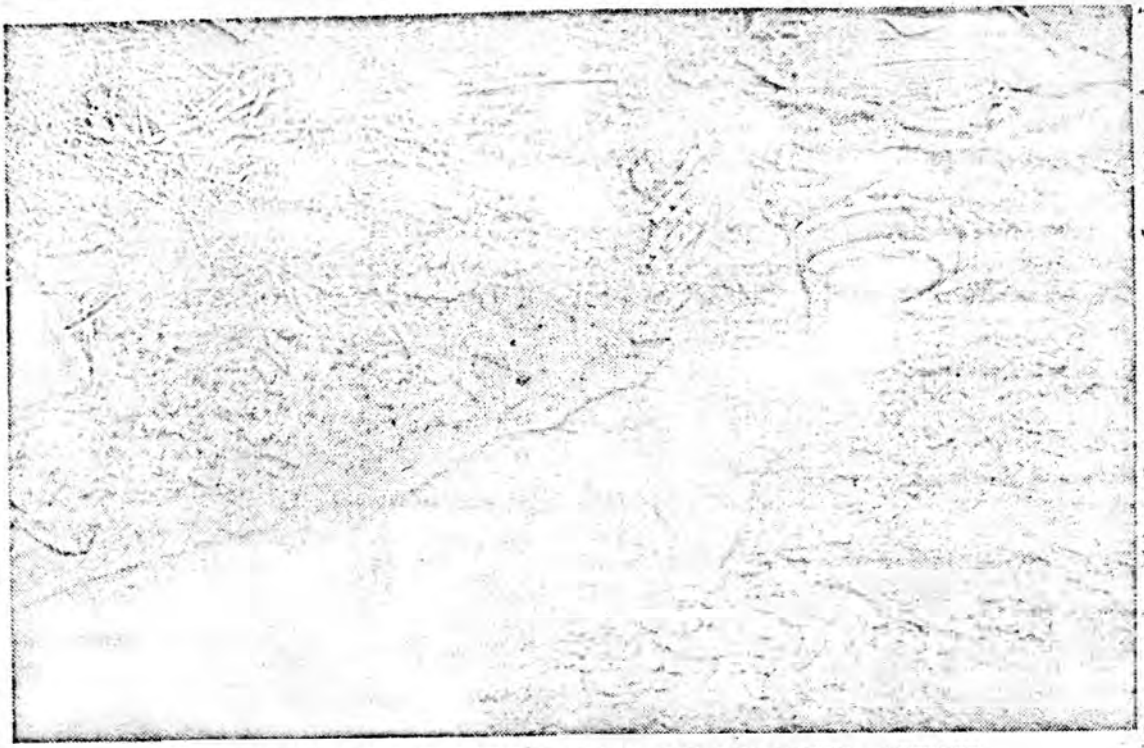
The possibility of having an open pit showing the prehistoric fossil bones where they fell also was suggested. The pit would be viewed from walks along its rim or from a porch of the museum.

Bell would not estimate the cost of these displays, nor when they would be completed.

The Parks Department already has $400,000 worth of projects under way or planned for Big Bone Lick, including a dam to create a seven-acre Lake for the park's water supply, construction of a superintendent's residence, acquisition of additional land and installation of a utility system, including a water plant, sewage plant, water lines and sewer lines.

Big Bone Lick State Park, which was established in 1961, had 161,000 visitors this year.

Area residents attending the meeting here expressed confidence that the number of visitors would be boosted to one million annually when improvements outlined in the master plan were completed.



BIG BONE LICK'S SPRING IS A DILAPIDATED AFFAIR

Big Bone Lick's History Goes Way Back

BILL LADD'S Almanac

WE HAVE been in Kentucky some 25 years, give or take a few, and all that time we have been promising ourselves we were going to take a look at Big Bone Lick.

Big Bone Lick is up toward Cincinnati just off Highway 42. This is a mineral spring, and its history goes back as far as Kentucky itself.

Human history, that is. Back long before human history began in this part of the world, tremendous animals came there to lick up the salt. Since it was a marshy area, a lot of them got mired up and died there.

Some of the first white men who came through the area began to dig up bones of these mastodons or mammoths. Some of the bones may be found in various places around the world. Complete skeletons are to be seen. But not very many in Kentucky. The University of Kentucky has some; the Filson Club; "Skip" Graham has stored a few at the Library, and there is one small collection near Big Bone itself.

Ladd Obeys His Stomach

We saw A. P. Rich, who lives near the spring. The spring is pretty dilapidated, a sort of brackish water running from same which Mr. Rich assures us tastes very good and is "good for the stomach."

Mr. Rich looked like a man we could trust, but our stomach said, "Don't try it." We followed our stomach's advice.

Rich himself has never seen any of the big skeletons which came from the area.

"The biggest one," he says, "is in the Royal College of Surgeons in London. All the time I was in England I aimed to look at this thing which came almost out of my back yard. But the Army never gave me time."

Early settlers and explorers found tremendous teeth at Big Bone. Some of them were over five feet long, which must have made the greatest toothache in all history when they got to going good.

Thomas Jefferson was much interested in the relics from Big Bone. He commissioned [illegible] of Cincinnati to ship a collection to him at Washington. Later they laid out the bones all over the White House floor, and Jefferson and the Doctor must have had a wonderful time putting them together.

Never Trust A Character

Goforth had a little ill fortune with his own collection of bones. A character persuaded Goforth he should ship a flock of bones down the river and sell them in New Orleans. When he got there he just kept going and the bones wound up in England. The Cincinnati newspapers wrote stinging editorials about his duplicity.

The mammoths and mastodons came from hundreds of miles away, lured by the Kentucky salt. How the bones happened to be found there was described by the Delaware Indians to President Jefferson.

"In ancient times," the Indians reported, "a herd of tremendous animals used to come to Big Bone Lick, and they destroyed the deer, the elk, the buffalo, and other animals which had been created by The Great Man for the exclusive use of the Indians.

"This made The Great Man very angry. He seized His lightning bolts and came down to earth and Big Bone. There He sat upon the mountain with His feet upon a rock. To this day, you can see where He sat and where He put His feet.

The Big Bull Escaped

"He flung His lightning bolts at the huge beasts and slew them, every one.

"All, that is, except the big bull. The bull shook the bolts off by catching them on his forehead. But one got by him, and stung him in the side.

"Enraged, the big bull turned, leaped across the Ohio River, leaped across the Wabash, leaped across the Great Lakes and finally went into Canada, where he remains to this day."

At Moose Jaw, Canada, Paul Hughes suggests.

It's marshy about the spring. We thought for a time we might get mired up, and some far distant archeological expedition might find our bones about [illegible] along with those of Mr. Rich.

DW 11-10-66 NOV 15 1966

NEWS

COMMONWEALTH OF KENTUCKY
DEPT. OF PUBLIC INFORMATION—NEWS DIVISION
CAPITOL ANNEX • FRANKFORT, KENTUCKY 40601 • PHONE 564-3460

BIG BONE LAKE

FRANKFORT--The State is awarding a $54,742 contract to Hawkins and Robinson Co., Frankfort, to construct a dam at Big Bone Lick State Park in Boone County. The dam will create a lake that will create a water supply for the park.

The Frankfort firm was the lowest bidder on the project, which is the initial step in establishing a complete utility system at the park. Contracts will be awarded soon for water distribution and sewage systems at the park, the State Parks Department says.

The seven-acre lake is part of a $400,000 improvement program announced for the park recently by Governor Edward T. Breathitt.

-30-

Ky.-Big Bone Lick State Park

news about Kentucky

COMMONWEALTH OF KENTUCKY • DEPARTMENT OF PUBLIC INFORMATION • CAPITOL ANNEX BLDG. • FRANKFORT, KENTUCKY 40601

June 11, 1970

CAMPING AREA AT BIG BONE NEARS COMPLETION

FRANKFORT, Ky.--Big Bone Lick State Resort Park will have a 62-site camping area with electrical outlets and a service building by August.

Work on the project began last November, W. James Host, commissioner of Parks says.

A fresh water storage tank has been completed, with blacktop to be laid and grass to be planted after sewer lines are laid. A sewage treatment plant also is under construction.

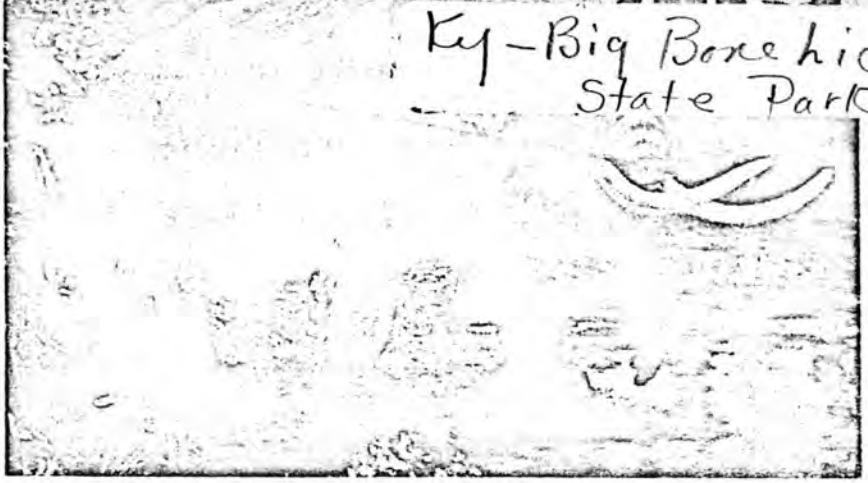
An access road to the site will be built by the Highway Department. Construction of the road will begin July 1 and be completed by August 30.

An overlook and picnic area on a high bluff near the camping area, are planned.

-30-

DW (6/11/70)
Frankfort, Kentucky

Ky-Big Bone Lick State Park



This is a reproduction of a painting by Charles R. Knight for the American Museum of History, showing one of the mastodons that used to roam over the Big Bone Lick section.

Big Bone Lick

It is a quiet village now, but it still is famous for the many mastodons which lived and died there and for a once-plentiful supply of sulphur waters

By BARRY BINGHAM, JR.
Courier-Journal Staff Writer

7-11-54

LONG before anyone thought of a Chamber of Commerce, Kentucky was a favorite stopping place for some of the world's biggest travelers.

Big travelers?

Actually, they were of the house-sized variety no longer to be found. If they were, they would make life uncomfortable, and probably short for us.

These travelers were the mastodons, eldest brothers of the elephant, and companions of the mammoth and other prehistoric animals.

They were certainly as large as any elephant to be found today. Some of their rib bones have measured 12 feet in length, and a skull has been found which is 6 feet across the forehead.

Big Bone Lick, in the southern part of Boone County, seemed to have been a popular stamping ground for these monsters. The first white man to see Big Bone was a French-Canadian Army officer, Capt. Charles Lemoyne de Longueil, who came down the Ohio River in 1729 and found a valley covered with mammoth bones.

At that time the land was partially a swamp, and relics of the ancient mastodon visitors could be picked up (if you had the strength) without having to do any digging.

The area was given the appropriate name of "Grave Yard of The Mammoths," and by 1800 its fame had spread all over the world. Archaeologists came from almost every European country to dig up the skeletons at Big Bone. It has been estimated parts of more than 100 mastodons have been taken out of Boone County.

Legend has it that one fellow was paid $100 to dig up the whole skeleton of a mastodon which was later sold to the British Museum for $3,000. Actually, there is a mastodon skeleton in London which did come from "Big Bone Lick, Kentucky."

Unfortunately, very few of the large number of bones dug up at Big Bone Lick stayed in this part of the world. Most of them have been scattered through museums and private collections all over Europe and North and South America.

Mrs. Hettie Baker, who lives near Big Bone on Gunpowder Creek, has the tooth of a mastodon which she and her husband bought about 50 years ago. This 10-pound chunk of ivory would be the pride of any museum, or dentist for that matter.

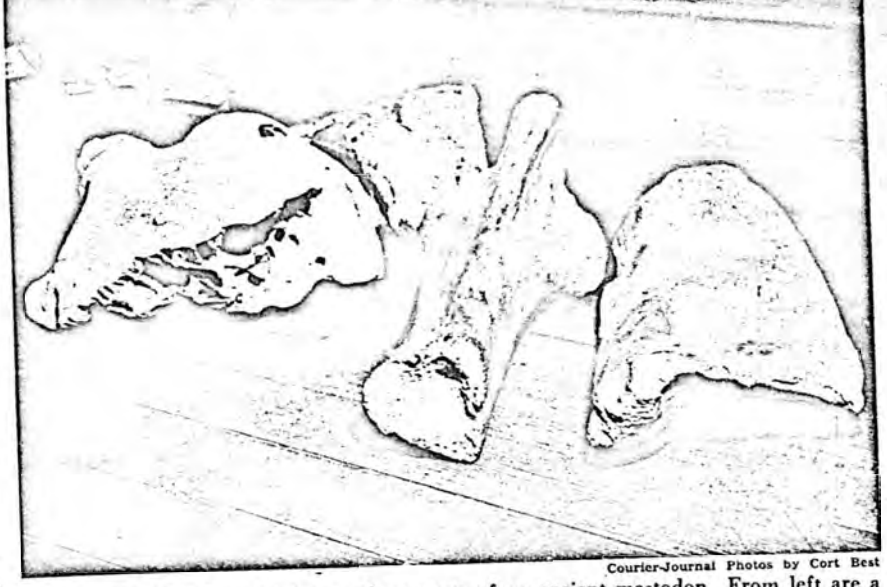
J. D. Moore, owner of one of the stores in Big Bone, has a small collection of mastodon relics. Even though they are only parts of bones which were broken long ago, they give a good idea of how big the inhabitants of Big Bone Lick used to be.

The reason this part of the country was so popular among our prehistoric travelers was its plentiful supply of salt, which they craved. Why so many of them died here is still a matter of conjecture.

Some say that the valley used to be a huge lake covered with a matting of buffalo grass. The mastodons, and other animals, in search of the salt licks probably ventured onto what appeared to be solid ground, then sank through.

It is said locally that within the last 50

Continued on following pages



Courier-Journal Photos by Cort Best

J. D. Moore of Big Bone Lick owns these parts of an ancient mastodon. From left are a piece of skull, two pieces of leg bones, and a sizable hunk of petrified mastodon flesh.

Big Bone used to have a large hotel; there was even talk of a sanatorium

years a man could jump on the marshy grass in the valley and shake the land for an acre around him.

The underlying soil definitely was not solid, since a fence post, once driven through the tough grass matting on the surface, sank out of sight with the push of a hand.

Today Big Bone is a fertile farming valley. The water supply, which at one time kept the land marshy, has practically dried up, leaving only a few sulphur springs.

But these springs have also played an important part in the history of Big Bone.

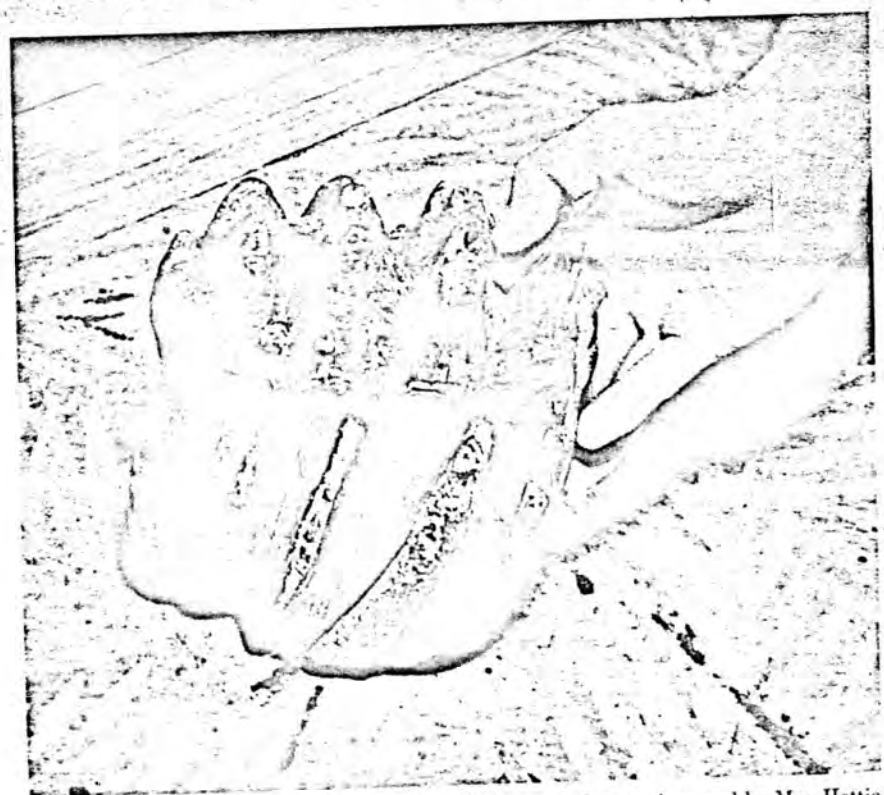
Back in 1890 Big Bone became a popular watering place. People from nearby cities were sent by their doctors to drink and bathe in the healing sulphur springs. There were three in the Big Bone vicinity.

Even though the town of Big Bone never grew to be very large, there was a sizable hotel for people taking the cure, and there was even talk of building a sanatorium there. However, luck went the other way.

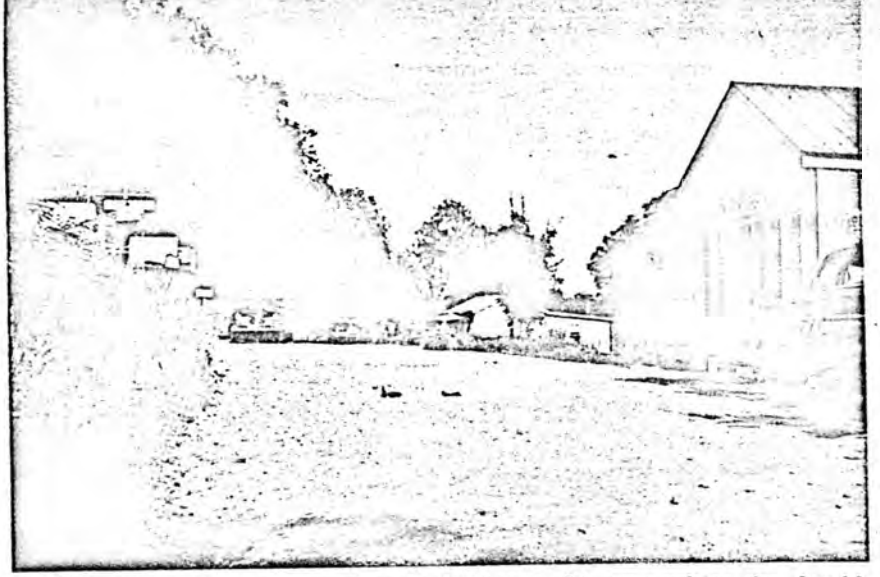
A Louisville oil-drilling company went to Big Bone to try and make a strike in the reputed underlying oil deposits. They drilled once, about a mile below the watering place, but were unsuccessful. Then they moved in closer to the springs and started to drill again.

The going was tough, through about 25 feet of solid rock, but in the words of Jake Rich, they finally "made a strike."

"There was a noise like a cannon shot," Jake said, "which ran along the bedrock of the valley, and a spout of water rose 60 feet in the air."



Oh, my aching tooth! Just look at the size of this mastodon tooth owned by Mrs. Hettie



That's Big Bone's "business center" you're looking at. It's not much on size—but it's quiet. There are only a dozen farm homes in the community, but two churches.

The oil company had tapped the underground lake which was the supply of sulphur water for the surrounding springs. From that time the springs went dry, and with them all thoughts of a sanatorium. Later even the hotel at Big Bone closed down.

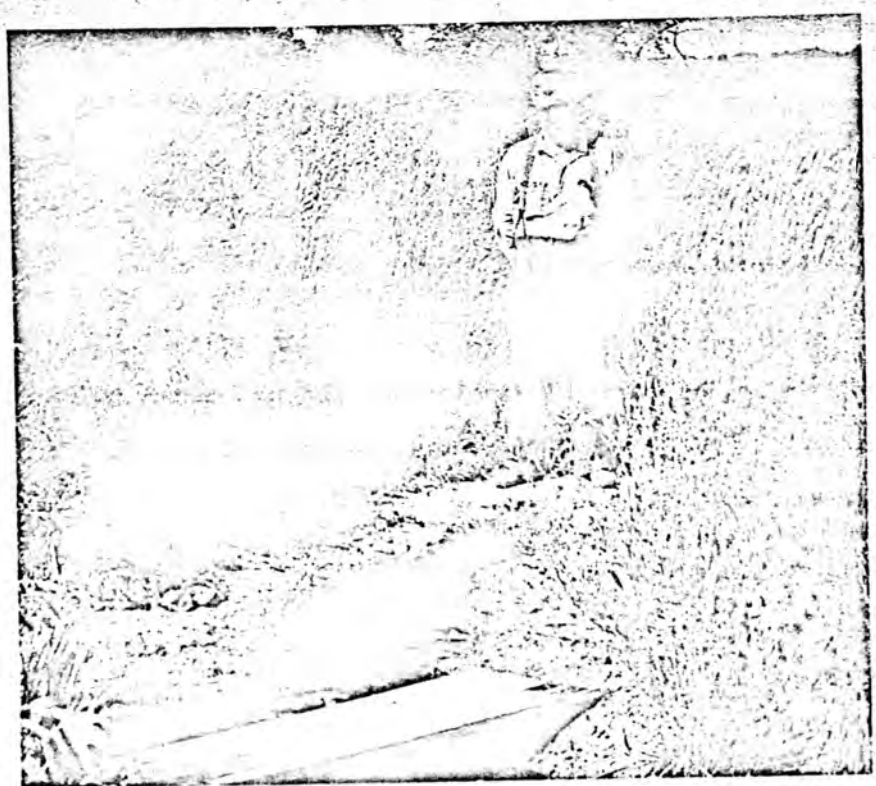
The drilling company went to another site and tried again, but with no more luck. This time they struck salt water, and all hopes of finding oil in Big Bone ceased.

Even though people continued to come to Big Bone up until the last few years to carry away some of the decreasing supply of sulphur water, the town no longer sees the thriving trade it used to.

Consequently it has diminished to a couple of stores, two churches, and a dozen farm houses.

Due to the clogging of the well which was drilled by the oil company, the supply of sulphur water has dwindled to a mere trickle. Some day, if the well could be redrilled, Big Bone might again attract people who are interested in the waters. They would certainly find it one of Kentucky's most historic and colorful regions.

This marker says Big Bone was discovered in 1789, but many authorities say 1729.



Perhaps Jake Rich is dreaming of the glory of the past when there was a plentiful sup-

Paleontologists can still find bones at the salt lick.

The Valley of the Bones

The last giant ground sloth lay his 1,500-pound self down in a Kentucky bog 8,500 years ago and became extinct. He had come there with the thousands of tapirs, musk oxen, giant bison, mastodons, and mammoths to lick the deposits left by salt and sulfur in the gurgling springs.

Then the Ice Age melted away and the old watering hole became a lonely and forgotten graveyard.

It's not forgotten anymore. Today this salt spring is known as Big Bone Lick State Park in Boone County, Kentucky. It's been called "the nation's outstanding prehistoric boneyard."

The state park is located off State 338, just 23 miles southwest of Cincinnati, Ohio. It features picnic grounds, a playground, outdoor shelter, fossil exhibits, sulfur springs, and paleontological diggings.

The 10,000-year-old dirt pile was first discovered by the French Canadian explorer de Longueil in 1729. And he left with his knapsack full of bones.

A second explorer, James Douglas, arrived with his party 44 years later, stumbling onto the valley of the bones. He saw the skeletal remains of huge animals, some half buried in the bog, others lying in a heap where they had fallen.

He raised his tents on mastodon ribs, used the vertebrae for benches, and departed with 10-pound teeth and 11-foot-long tusks for his souvenirs.

When Thomas Jefferson was President and an official of the American Philosophical Society, he ordered Meriwether Lewis and William Clark to employ laborers in the valley to collect as many bones as possible. In three weeks they had gathered enough fossils to ship three huge boxes back to Washington.

These finally wound up at the White House, the Philosophical Society in Philadelphia, and the National Institute of France in Paris. The curious came and the collectors rode in by wagon.

By 1840 it was estimated that the bones of 100 mastodons, 20 Arctic elephants, and innumerable other mammals had been removed. Amateur diggers and professional scientists continued their excavations, and today museums in both Europe and America display the prehistoric bones from Big Bone Lick.

During the 1800's, the salt springs, still running after 10,000 years, attracted the salt industry and the salt industry advertised the springs.

Suddenly it became quite fashionable to visit Big Bone Lick simply to drink its water.

Large hotels were built, and the old salt lick became one of the most popular spas west of the Alleghenies. It was frequently patronized by affluent families who came to spend a season "taking the waters" for their tonic value.

But the spa was finally abandoned. And no one drinks the water anymore.

The bone-rich bogs are now under the protection of the Commonwealth of Kentucky. Excavations have been under scientific control since 1962, for the first time in the salt spring's history.

The University of Nebraska took charge of the diggings, using its own funds and grants from the American Philosophical Society of Philadelphia and the National Science Foundation in Washington.

For almost 250 years, hunters and paleontologists carted away strange and prehistoric relics, all because a ground sloth and a mastodon and a mammoth lay down one day to die and become extinct.