People and Places: Big Bone Lick

Randy Moore

Big Bone Lick is a swampy area in Boone County, Kentucky, that was discovered in 1739 by Charles Le Moyne as he led French soldiers down the Ohio River from Canada. The area was described in 1740 as “the place where they found the elephant bones in 1739.” The bones in question were abundant and large; vertebrae were big enough to be used as chairs, and ribs were used as tent poles. Big Bone Lick later became renowned for its mineral-rich springs, which had lured animals such as bison (both ancient and modern), primitive horses, ground sloths, mammoths, and mastodons to the area. After its discovery, Big Bone Lick became a center for the salt-making industry; workers used 600 gallons of water to produce one bushel of salt. When cheaper sources of salt were found elsewhere and the salt-making businesses closed in the early 1800s, Big Bone Lick once again became famous for its fossils (Hedeen 2008).

In 1803, Thomas Jefferson—an avid paleontologist—sent Meriwether Lewis to Big Bone Lick to collect fossils. Lewis packaged some of the area’s fossils in a crate for Jefferson, but it (and the boat it was shipped aboard) sank near Natchez, Mississippi. Four years later, Jefferson sent General William Clark and ten other men to collect fossils at Big Bone Lick. Clark’s three-week excavation—the first organized vertebrate paleontology expedition in the United States—established American vertebrate paleontology. Clark and his crew shipped more than 300 bones and teeth, primarily from Pleistocene mammals, to the White House, and this time, they made it safely. Jefferson kept some of the specimens for himself and sent others to the America Philosophical Society and to collectors in France. (Today, bones from Big Bone Lick are displayed at Monticello, Jefferson’s home.)

Fossils from the Lick were studied by a variety of famous scientists, including Georges-Louis Leclerc de Buffon, who identified the fossils he received as two species: a hippopotamus and an elephant-like mammoth. Buffon’s claim that the mammoth “no longer exists anywhere” supported extinction and contradicted the prevailing Judaeo-Christian belief in a perfect, static creation. Jefferson, who rejected extinction, used fossils of mammoths to counter Buffon’s claims about American degeneracy—that is, that animal species in North America were inferior to those of Europe because America’s soils and climate were inferior to those of the Old World. (The longest chapter of Jefferson’s only book, Notes on the State of Virginia, was devoted to debunking Buffon’s claim.) Jefferson acknowledged that some species might have disappeared from eastern America, but they could still be living in the unexplored West. However, Jefferson was wrong, and fossils from Big Bone Lick helped convince people that extinction was real, and that some species had vanished from Earth.
Bones from Big Bone Lick were well-known among scientists and others. Georges Cuvier, who documented extinction, published a sketch of a 100-centimeter-long femur collected at Big Bone Lick in 1739, and Benjamin Franklin noted that fossils from Big Bone Lick (“the Great Licking Place”) resembled those of elephants that “now inhabit naturally only hot countries where there is no winter, and yet these remains are found in a winter country.” In 1841, Charles Lyell visited Big Bone Lick, and many other people (for example, Jean-Baptiste Lamarck) sought fossils from Big Bone Lick to study.

By the early 1800s, Big Bone Lick was a famous health resort, and the first hotel there (the Clay Hotel) opened in 1815 to accommodate visitors who came to enjoy the Lick’s medicinal powers. Physicians claimed that water from the Lick helped treat and prevent maladies such as boils, tuberculosis, hemorrhoids, rheumatism, uterine trouble, and skin parasites, and that it was also useful as “a useful hair tonic” that provided “a peculiarly stimulating bath.” In 1870, a second hotel opened at the Lick, but tourism began to fade, and in 1945, the remains of the last hotel at the Lick were sold for scrap materials.

Big Bone Lick (“the tomb of the mammoths”) is located just north of Answers in Genesis’s Creation Museum, which is ironic given its importance to vertebrate paleontology. Its importance as a scientific and historical resource is reflected in the fact that Big Bone Lick became Big Bone Lick State Park (Figure 1) in 1960, and was designated a National Historic Site in 1971, a Lewis & Clark Heritage Trail Site in 2002, and a National Natural Landmark in 2009. Big Bone Lick State Park, which covers 525 acres, is between Rabbit Hash and Beaver Lick; its museum includes fossils, art, and a half-ton skull of a mastodon.

**Figure 1.** The sign at the entrance to Big Bone Lick State Park. Photograph: Randy Moore.
REFERENCES

ABOUT THE AUTHOR
Randy Moore is the HT Morse–Alumni Distinguished Professor of Biology at the University of Minnesota. His most recent book (with coauthor Sehoya Cotner) is Understanding Galápagos: What You’ll See and What It Means (New York: McGraw-Hill, 2013).

AUTHOR’S ADDRESS
Randy Moore
University of Minnesota, MCB 3-154
420 Washington Avenue SE
Minneapolis MN 55455
rmoore@umn.edu