

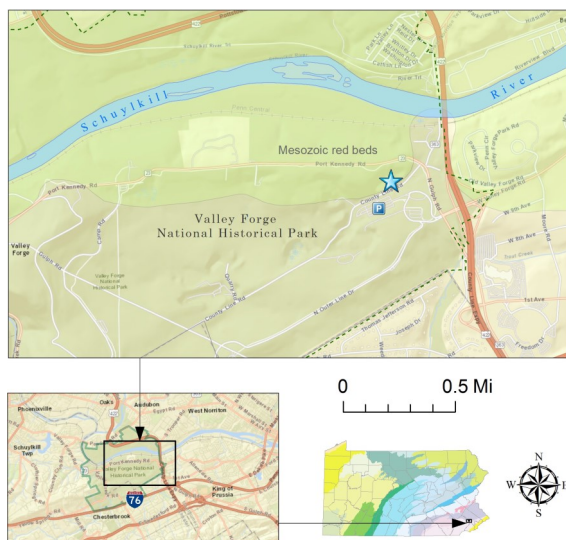
PORT KENNEDY BONE CAVE, MONTGOMERY COUNTY



Trail of Geology
16-091.0

Geology

In the early 1870s, workers at a limestone quarry near the village of Port Kennedy uncovered a rich cache of Middle Pleistocene fossils (approximately 750,000 years old). Local scientists were called in, and ultimately renowned paleontologists Edward Cope and Charles Wheatley were among those who published reports on the fossils. The discovery remains as one of the most important mammal fossil finds in North America. The site was a fissure trap, probably originating as a collapsed cave that formed a steep-walled sinkhole in a forest. The quarry workers broke into the fossil debris from the side (see sketch below). The fissure was steep enough to be a trap for large animals, including giant ground sloths, saber-toothed cats, short-faced bears, peccaries, and mastodons. Plant, insect, reptile, and bird fossils also were recovered. More than 1,200 fossils were found.



The Port Kennedy quarry has long been out of use. It was first a victim to groundwater flooding in 1896, which stopped collection work. Later, a company used the site as a dump for asbestos-contaminated waste products. Ultimately, the quarry was filled in. The buried quarry is within Valley Forge National Historical Park. Most of the fossils are stored at the Academy of Natural Sciences in Philadelphia; however, a few of the fossils are on display at the Valley Forge Visitor Center.

Daeschler, E. B., Lamanna, M. C., and Carfioli, Margaret, 2005, On the trail of an important Ice Age fossil deposit—Rediscovering the Port Kennedy cave (Middle Pleistocene), Valley Forge National Historical Park, Montgomery County, Pennsylvania: [Park Science](#), v. 23, no. 2, p. 31–34

Hojdila, Jamie, DeMayo, Toni, Baughman, Sam, and others, 2005, The long-lost cave has been found!: *Park Science*, v. 23, no. 2, p. 35–36.

Wheatley, C. M., 1871, Notice of the discovery of a cave in eastern Pennsylvania, containing remains of post-Pliocene fossils, including those of Mastodon, Tapir, Megalonyx, Mylodon, etc.: *American Journal of Science*, 3rd ser., v. 1, p. 235–237.

Wiswall, G. C., 1993, Valley Forge National Historical Park, Montgomery and Chester Counties—The geologic history: Pennsylvania Geological Survey, 4th ser., [Trail of Geology 16-008.0](#), 10 p.

Valley Forge National Historical Park web page
of the National Park Service.



Cross section of bone cave (from Wheatley, 1871, p. 237). Fossils were concentrated in 18 inches of organic clay at Section "B" and 6 inches below that in red clay.