

On Fossils and Extinction

WHEN *NOTES ON THE STATE of Virginia* was written, Jefferson had not actually seen a live elephant. The first one, an Asian elephant, was brought to America in 1796, and the next year Jefferson paid five cents to see it on display on Market Street, Philadelphia. Nonetheless, in a genuinely innovative contribution to American paleontology, he had concluded that the Siberian mammoth and the American mastodon were species of the elephant family adapted for cold climates and that the African and the Asian elephants were quite different species adapted for heat. In an early exercise in biogeography, he even defined the ranges of the two kinds as being split at around $36\frac{1}{2}$ degrees latitude north.

But Jefferson was involved in politics and diplomacy for almost a decade after completing *Notes* and had little time for studying fossils until he resigned as Washington's secretary of state in 1793. Then, in April 1796, he received a tantalizing letter from his friend John Stuart in Greenbrier County (then part of Virginia, now West Virginia) about another enormous American mammal. The letter began: "SIR, Being informed you have retired from public Business and returned to your former Residence in Albemarle, and observing by your Notes your very curious desire for Examining into the antiquitys of our Country, I thought the Bones of a Tremendious animal of the Clawed kind lately found in a Cave by some Saltpetre manufacturers about five miles from my House might afford you some amusement, have therefore procured you such as were saved . . . I donot remember to have seen any account in the History of our Country, or any other of such an animal which probabelly was of the Lion kind."¹

When the bones arrived they were indeed intriguing, consisting of