

# The *Megatherium*, the *Toxodon*, and the Succession of Types



Only around 1800 did naturalists recognize that several large and unfamiliar vertebrates had once roamed the earth. The mastodon and mammoth were the first to be identified, and they were soon joined by the *Megatherium*. It was Georges Cuvier who determined that the mastodon and mammoth were not elephants but extinct species, and who identified the *Megatherium* as an extinct giant ground sloth (right).

Darwin had never expressed much interest in fossils before the *Beagle* voyage, but in August, 1833, in Argentina, Darwin came across the fossil remains of a half-dozen large vertebrates, including parts of several *Megatheriums*, and some unknown animals. He sent these back to England for identification, and one of them turned out to be a brand new species, an enormous rat-like animal that would be named *Toxodon* (left).

Back from the *Beagle*, and with his fossils identified and named by Richard Owen, Darwin had one of his first great insights. He noted that one finds fossil giant sloths in the same countries where there are smaller living sloths. It is almost as if there were a connection over time between the two species. Still later, Darwin would realize that this would make sense, if the living species had evolved from the earlier ones.

Left: *Toxodon* skull, found by Charles Darwin in South America, from Charles Darwin, *Zoology of the Voyage of H.M.S. Beagle*, Part I: Fossil Mammalia, 1840.

Top Right: *Megatherium* skeleton, from South America, reconstructed with a human skeleton for scale, from Supplement to the... *Encyclopaedia Britannica*, 1824.

Bottom Right: Skeleton of a modern sloth of South America, from Georges Cuvier, *Recherches sur les ossements fossiles de quadrupeds*, 1812.



The  
Grandeur  
of Life

