

of the present day subsist. Whatever resemblance certain of these species bear to those of existing species, the general mass of this population had a different character; the greater part of the races which composed it have been utterly destroyed. Among all these mammiferous animals, the greater number of which have their congeners living at the present day, there has not been found a single bone or tooth of any species of ape or monkey. Nor is there any trace of man: all the human bones which have been found, along with those of which we have been speaking, have occurred accidentally; and their number besides is exceedingly small, which assuredly would not have been the case, if men had been then settled in the countries which these animals inhabited."* When Cuvier published the first edition of his *Recherches sur les Ossements fossiles*, he too hastily concluded, that we were already acquainted with all the existing species of large land quadrupeds; and he hence inferred, that it was highly improbable that any of the species of unknown quadrupeds, whose bones are found in diluvial soils, should be still living. Since that time a large species of living tapir has been found in the East Indies; and other discoveries of new quadrupeds have been made: hence we cannot conclude with absolute certainty, that all the species of unknown fossil quadrupeds are extinct, though it seems highly probable that the greater number of the races have perished. The animals whose bones are found in peat bogs and marshes, such as the elk in Ireland, and the great mastodon in Kentucky, may, I conceive be referred with much probability to a more recent epoch, than that in which the diluvial beds were deposited.

Skeletons, both of the Irish elk and the great American mastodon, have been found erect in peat bogs and marshes, which proves that the surface of the ground has undergone little change since the animals perished; and the further circumstance of the flesh and stomach of the mastodon being found near the surface, not protected, like the bodies of the elephant and rhinoceros found in Siberia, by ice, seems opposed to the general belief in the high antiquity of these animal remains; and it is admitted by Cuvier, that they are in better preservation than any other fossil bones. The quadrupeds whose bones are buried in beds of clay, sand or gravel, or accumulated in caverns, undoubtedly lived in a very remote period, and under a different condition of our planet to the present one. The northern parts of Europe seem now incapable of supporting the immense number of elephants, which have formerly spread over all the valleys bordering the Frozen Ocean. Were we to admit that the temperature of the earth was then higher than at present, which the remains of palms and other tropical plants found in the northern lati-

* For an account of human bones, found in caverns mixed with the bones of extinct species, see the preceding Chapter.