

which was once supposed to separate Mesozoic and Tertiary formations.

The name Tertiary, given in the early days of geology, before much was known regarding fossils and their history, has retained its hold on the literature of the science. It is often replaced by the terms "Cainozoic" (*recent life*), or "Neozoic" (*new life*), which express the great fact that it is in the series of strata comprised under these designations that most recent species and genera have their earliest representatives. Taking as the basis of classification the percentage of living species of mollusca found by Deshayes in the different groups of the Tertiary series, Lyell proposed a scheme of arrangement which has been generally adopted. The older Tertiary formations, in which the number of still living species of shells is very small, he named *Eocene* (*dawn of the recent*), including under that title those parts of the Tertiary series of the London and Paris basins wherein the proportion of existing species of shells was only 3 $\frac{1}{2}$ per cent.¹ The middle Tertiary beds in the valleys of the Loire, Garonne, and Dordogne, containing 17 per cent of living species, were termed *Miocene* (*less recent*), that is, containing a minority of recent forms. The younger Tertiary formations of Italy were included under the designation *Pliocene* (*more recent*), because they contained a majority, or from 36 to 95 per cent, of living species. This newest series, however, was further subdivided into Older Pliocene (35 to 50 per cent of living species) and Newer Pliocene (90 to 95 per cent). A still later group of deposits was termed *Pleistocene* (*most recent*), where the shells all belonged to living species, but the mammals were partly

¹ Some palæontologists, however, doubt whether any older Tertiary species, except of foraminifera or other lowly organisms, is still living.