The standard geologic time scale attempts to give names to meaningful periods of time in Earth history, just as scholars of American history speak of a "colonial period", an "antebellum period", and so on. Note the decreasing size of time periods closer to the present (i.e., to the top of diagram). We live in the most recent days of the Holocene Epoch of the Neogene (or Quaternary) Period of the Cenozoic Era of the Phanerozoic Eon.

In 2003, the International Commission on Stratigraphy divided the Cenozoic into Paleogene and Neogene, eliminating the long-used terms "Tertiary" and "Quaternary". "Paleogene" and "Neogene" are paleontologically meaningful terms, but the major paleoenvironmental breaks are at the Eocene-Oligocene boundary (a major global cooling event) and Pliocene-Pleistocene boundary (the onset of major continental glaciation in the Northern Hemisphere - hence the expression "Quaternary glaciation"). Earth scientists interested in environmental change are thus prone to continue using "Tertiary" and "Quaternary" rather than "Paleogene" and "Neogene". Many Earth scientists also continue to refer to the boundary at the end of the Cretaceous as the "K-T" boundary, even though it would be the "K-P" boundary in the new usage.