

may be useful in warning us not to assume too hastily that the point which our retrospect may have reached at the present moment can be regarded as fixing the date of the first introduction of any one class of beings upon the earth.

Dates of the Discovery of different Classes of Fossil Vertebrata ; showing the gradual Progress made in tracing them to Rocks of higher Antiquity.

	Year.	Formations.	Geographical Localities.
Mammalia.	1798.	Middle Eocene (or B. i. p. 222).	Paris (Gypsum of Montmartre). ¹
	1818.	Lower Oolite.	Stonesfield. ²
	1847.	Upper Trias.	Stuttgart. ³
Aves.	1782.	Middle Eocene (or B. i. p. 222).	Paris (Gypsum - Montmartre). ⁴
	1839.	Lower Eocene.	London (Sheppey Clay). ⁵
Reptilia.	1710.	Permian (or Zechstein).	Thuringia. ⁶
	1844.	Carboniferous.	Snarbruck, near Treves. ⁷
	1852.	Upper Devonian.	Elgin. ⁸
Pisces.	1709.	Permian (or Kupfer-schiefer).	Thuringia. ⁹
	1793.	Carboniferous (Mountain Limestone).	Glasgow. ¹⁰
	1828.	Devonian.	Caithness. ¹¹
	1840.	Upper Silurian.	Ludlow. ¹²

¹ Cuvier (George). Bulletin Soc. Philom. xx. Scattered bones were found in the gypsum some years before; but they were determined osteologically, and their true geological position was assigned to them in this memoir.

² In 1818, Cuvier, visiting the Museum of Oxford, decided on the mammalian character of a jaw from Stonesfield. See also above, p. 311.

³ Plieninger, Prof. See above, p. 340.

⁴ M. Darcet discovered, and Lamanon figured, as a fossil bird, some remains from Montmartre, afterwards recognized as such by Cuvier (Ossements Foss., Art. "Oiseaux").

⁵ Owen, Prof., Geol. Trans. 2d Ser. vol. vi. p. 203, 1839. The fossil bird discovered in the same year in the slates of Glaris in the Alps, and at first referred to the chalk, is now supposed to belong to the Nummulitic beds, and may therefore be of newer date than the Sheppey Clay.

⁶ The fossil monitor of Thuringia (*Protorosaurus Speneri*, V. Meyer) was figured by Spener, of Berlin, in 1810. (Miscel. Berlin.)

⁷ See above, p. 397.

⁸ See above, p. 412.

⁹ Memorabilia Saxonie Subterr., Leipsic, 1709.

¹⁰ History of Rutherglen, by Rev. David Ure, 1793.

¹¹ Sedgwick and Murchison, Geol. Trans. 2d Ser. vol. iii. p. 141, 1828.

¹² Sir R. Murchison. See above, p. 431.

Obs. The evidence derived from footprints, though often to be relied on, is omitted in the above table, as being less exact than that founded on bones and teeth.

How many living writers are there who, before the year 1844, generalized fearlessly on the non-existence of reptiles before the Permian era! Yet, in the course of ten years, they have lived to see the earliest known date of the creation of reptiles carried back successively, first to the Carboniferous, and then to the Upper Devonian periods. Before the year 1818, it was the popular belief that the Palæotherium of the Paris gypsum and its associates were the first warm-blooded quadrupeds that ever