

OLLI Age of Reptiles

Fall 2022 with Nicole Myers

Week 6

Geologic Time Scale				
EON ERA	PERIOD	EPOCH		
Phanerozoic	Cenozoic	Quaternary	Holocene	Present
		Tertiary	Pleistocene	0.01
			Pliocene	2.6
		Paleogene	Miocene	5.3
			Oligocene	23.0
			Eocene	33.9
			Paleocene	55.8
			Cretaceous	65.5
		Mesozoic	Jurassic	145.5
			Triassic	199.6
	Carboniferous		Permian	251
			Pennsylvanian	299
			Mississippian	318
	Paleozoic		Devonian	359.2
			Silurian	416
			Ordovician	443.7
			Cambrian	488.3
			Precambrian	Proterozoic
		Archean		2500
		Hadean		4000

Digital presentations associated with the course & handouts will be available at: <https://www.appreciatingearth.com/olli>

Simplified Geologic Time Scale, this last week we focus on the diversification & extinction of reptiles at the end of the Cretaceous Period of the Mesozoic Era, the Age of Reptiles.

Simplified Geologic Time Scale from: Spooner, Alecia M. "The Geologic Timescale." *Dummies*. A Wiley Brand. <https://www.dummies.com/education/science/the-geologic-timescale/>

Cladograms: We focus on the reptilians of the Cretaceous period, as life covered in scales and feathers diversified on landmasses separated by tectonic divergence & rising sea levels....until a giant space object collided with Earth and ended the Age of the Reptiles.

Brusatte, S.L., O'Connor, J.K., Jarvis, E.D. (2015). The origin and diversification of birds. *Current Biology* 25, R888–R898. The relationships of birds and the evolution of key traits. *Solid black lines* indicate the span of time each lineage is known from the fossil record.

https://www.researchgate.net/figure/Summary-phylogeny-genealogical-tree-of-birds_fig2_282646227

