# Fossil time ranges continue to expand up and down

Michael J. Oard

For the last few decades, several creationists have been reporting on the vertical expansion of fossil ranges, interpreted as either 'older' or 'vounger' in the geological column timescale. These finds are probably the tip of the iceberg, since we cannot go through all the relevant journals that would report range expansions. In fact, many of these issues likely go unreported because many 'anomalous' or 'uninteresting' fossils end up in the back shelves of museum collections, as Dr Carl Werner has discovered.1 As such, it is hard to know just how large the scale of this phenomenon is, though it is almost certainly more severe than reported in any literature, secular or creationist.

Some range expansions are quite large, such as moving the time boundaries by 50 to 100 Ma or more. Some examples are: the pushing back of eukaryote evolution one billion years;2 the discovery of grass in dinosaur dung from the Mesozoic;3 'sophisticated', diverse mammals now found in the Mesozoic;4 and the origin of flowering plants may have been pushed back 100 Ma.5,6 Moreover, organisms that were thought to be extinct for many millions of years are found to be living, such as the Wollemi pine found alive in New South Wales, Australia.7 Archaeological discoveries also contribute to the range expansions by indicating man was always smart, making it less likely he evolved.8

Many of these range expansions are not considered too significant, being only a matter of millions of years or from a fossil that is not used as an index fossil. Nonetheless, it still indicates that the fossil record is not precisely timed as evolutionists often make it out to be. Moreover, it accentuates the problem of stasis, revealing the *ad hoc* nature of much evolutionary storytelling about the fossils. Essentially, it shows that evolution and deep time act more as assumptions constraining their

interpretation of the fossil record than as conclusions they draw from the fossil record.

## Origin of snakes pushed back 70 Ma

One of the most significant new discoveries is snake fossils that are 70 Ma older than scientists expected.



**Figure 1.** A rare, New World brown spider monkey, *Ateles hybridus*, from Venezuela, northwest South America

This date pushes snakes back to the Middle Jurassic. 9,10 A variety of snake fossils were found in four countries, suggesting an 'origin' many millions of years earlier.

## New World monkeys pushed back 10 Ma

The New World monkeys are found alive today in South and Central America and on the Caribbean islands (figure 1). Evolutionists believe they originated from Africa. Creationists believe their ancestors came off the Ark and spread to South America after the Flood. New research pushes back their fossil record in South America by 10 Ma to the late Eocene.11 Evolutionists have mostly come to believe the New World monkeys arrived from Africa on vegetation.<sup>11,12</sup> One problem for them is that the vegetation rafts observed today are quite small.

## Sophisticated mammal traits continue to be pushed down into the Middle Jurassic

Sophisticated mammal fossils have been pushed back to the Middle Jurassic of the Mesozoic. Evolutionists used to claim that the Mesozoic had only rat-like mammals. But fossils that display other mammal traits are also being found in the Middle Jurassic. New fossils found in China push the climbing locomotor adaptation of mammals back to the Middle Jurassic.<sup>13</sup> This deduction is based on the skeletal properties. It is admitted that numerous mammal traits 'evolved' early and independently.14 Of course, all this mammal evolution is attributed to 'convergent evolution'. The evolution of sophisticated mammals is now compressed into a very short time. This points more to special creation than evolution which needs much time.

#### Well-preserved ostracods back 25 Ma earlier in Ordovician

Ostracods are small crustaceans, and are the most abundant arthropods in the fossil record. They were thought to be older than the Silurian, but the fossil record did not show any in the Ordovician. But now it is 'certain' since they have found fossils in the late Ordovician, extending the knowledge of well-preserved ostracods back 25 Ma. <sup>15</sup> Amazingly even some soft parts are preserved.

This may seem like a successful evolutionary prediction. However, from a biblical perspective, the fossil record is already expected to preserve only a general order, so even such 'expected' range extensions are perfectly consistent with a biblical view of the fossil record. Moreover, when seen against the general trend of unexpected range extensions, the prediction is far less impressive, and itself still open to future revision.

#### A possible type of amniote pushed back form Late Triassic to Middle Triassic

Teeth and jaws from an enigmatic taxon, probably one of the Amniota—reptiles, birds, and mammals—was pushed back from the Late Triassic in the US to the Middle Triassic in Germany.<sup>16</sup>

## Earliest modern bandicoot and bilby pushed back 5 to 10 Ma

Bandicoots and bilbys are small marsupials living in Australia. The earliest fossils were 'dated' Pliocene until they were recently found in the middle Miocene of the Riversleigh World Heritage area of north-west Queensland, Australia. These are likely post-Flood marsupials that arrived in Australia. It does not nullify the idea that the Flood/post-Flood boundary is in the late Cenozoic,

since the Miocene is late Cenozoic. 18 We cannot rely on uniformitarian dating methods to determine the boundary, which can be Miocene in one location and even middle Pleistocene in another location. 19

## Whale echolocation pushed back

Whale echolocation works like sonar and is extremely sophisticated. Evolutionists consider that it took a long time for the complex behaviour and anatomy to evolve after whales first evolved. However, a fossil from the Oligocene, about 28 Ma ago, shows features indicative of echolocation.<sup>20</sup> The researchers conclude:

"... that a rudimentary form of echolocation evolved in the early Oligocene, shortly after odon-tocetes [toothed whales] diverged from the ancestors of the filter-feeding whales (mysticetes)."<sup>21</sup>

So whales had echolocation right from the beginning. Maybe echolocation and whales did not evolve, although the researchers couch the remarkable discovery in evolutionary terms by claiming that the echolocation was 'rudimentary', although they give no reasons why they make this claim. How can it be rudimentary? It either works or it doesn't. The bones show the evidence of echolocation, and the echolocation is considered rudimentary likely because of the early date of the fossil.

#### A type of bird pushed back 5 to 6 Ma

A large category of birds is called Ornithuromorpha. Many are extinct but the category also includes all living birds. Fossils of this bird type are found in the famous Jehol Biota in China where half the diversity of Mesozoic birds is found. This type of bird has recently been found in a lower formation within the Jehol Biota,

CREATION.com

pushing Ornithuromorpha back 5 to 6 Ma.<sup>22</sup> This may seem insignificant, but in many cases the extensions are changing 'inch by inch'. Over a longer period of investigation, these extensions add up and show how the fossil record looks less and less like a time series.

## Dinosaur footprints push origins back around 20 Ma

It has been widely taught that dinosaurs evolved about 230 Ma ago. But there are now dinosaur tracks that date back to around 250 Ma ago, right after the massive 'Permian extinction'.<sup>23</sup> It is interesting that these tracks are quadrupedal, while the earliest dinosaurs are thought to have been bipedal.

#### Origin of pterodactyls pushed back over 5 Ma

A new pterodactyl fossil has been discovered in north-west China.<sup>24,25</sup> It pushes the origin of pterodactyls back by more than 5 Ma.

#### Two new living fossils

Two new living fossils have been discovered. A certain dinoflagellate was thought extinct in at least the Atlantic Ocean in the early Pleistocene, but has been discovered recently in a warm pool in the western Pacific and Indian Oceans. <sup>26</sup> A marine worm from the Northern Hemisphere, called *Protuliphila*, was thought extinct 4 Ma ago, but has been found alive and well near Picton, New Zealand. <sup>27</sup>

#### Conclusion

These fossil range expansions show that a precise fossil order is not yet established. When fossils are found older than expected, it shows that stasis is the predominant pattern

in the fossil record, which evolution does not predict, considering that some organisms have supposedly evolved rapidly from primitive primates to humans while others have stayed essentially identical for the same period of time. In some cases, it can also show there was little time for them to 'evolve' and they change very little afterwards. Living fossils challenge evolution and uniformitarianism because there are often vast time gaps between their last appearances and the present. This pattern of stasis and increased ranges is however perfectly consistent with seeing the fossil record as a general burial order in a single cataclysm like Noah's Flood.

#### References

- Werner, C., Living Fossils—Evolution: The Grand Experiment, vol. 2, New Leaf Press, Green Forest. AR.
- Oard, M.J., Supposed eukaryote evolution pushed back one billion years, *J. Creation* 15(1): 4, 2001.
- Oard, M.J., The origin of grass pushed well back into the 'Mesozoic', J. Creation 21(1):9, 2007.
- 4. Oard, M.J., Jurassic mammals—more surprisingly diverse, *J. Creation* **21**(2):10–11, 2007.
- Batten, D., Pollen problems, Creation 36(2):54, 2014.
- 6. Oard, M.J., Fossil time ranges continue to be increased, *J. Creation* **28**(3):3–4, 2014.
- Wieland, C., Sensational Australian tree ... like 'finding a live dinosaur', Creation 17(2):13, 1995
- 8. Oard, M.J., Post-Flood man continues to become smarter, *J. Creation* **27**(3):3, 2013.
- Caldwell, M.W., Nydam, R.L., Palci, A., and Apesteguia, S., The oldest known snakes from the Middle Jurassic-Lower Cretaceous provide insights on snake evolution, *Nature communications* 6: 27, January 2015; doi:10.1038/ncomms 6996.
- Bell, P., Standard snake evolution story stymied by spate of fossil discoveries, *J. Creation* 29(3): 8–10, 2015.
- Bond, M., Tejedor, M.F., Campbell Jr, K.E., Chornogubsky, L., Novo, N., and Goin, F., Eocene primates of South America and the African origin of New World monkeys, *Nature* 520:538-541, 2015.
- De Queiroz, A., The Monkey's Voyage: How Improbable Journeys Shaped the History of Life, Basic Books, New York, 2014.
- Meng, Q.-J, Ji, Q., Zhang, Y.-G., Liu, D., Grossnickle, D.M., and Luo, Z.-X., An arboreal docodont from the Jurassic and mammalianform ecological diversification, Science 347:764-768, 2015.

- Martin, T., Marugán-Lubón, J., Vullo, R., Martin-Abad, H., Luo, Z.-X., and Buscalioni, A.D., A cretaceous eutriconodont and integument evolution in early mammals, *Nature* 526: 380–384, 2015.
- Siveter, D.J., Tanaka, G., Farrell, U.C., Martin, M.J., Siveter, D.J., and Briggs, D.E.G., Exceptionally preserved 450-million-year-old Ordovician ostracods with brood care, *Current Biology* 24:801–806, 2014.
- Sues, H.-D. and Schoch, R.R., First record of Colognathus (?Amniota) from the Middle Triassic of Europe, J. Vertebrate Paleontology 33(4): 998–1002, 2013.
- 17. Travouillon, K.J., Hand, S.J., Archer, M., and Black, K.H., Earliest modern bandicoot and bilby (marsupialia, peramelidae, and thylacomyidae) from the Miocene of the Riversleigh World Heritage area, northwestern Queensland, Australia, J. Vertebrate Paleontology 34(2):375–382, 2014.
- 18. Oard, M.J., (ebook). *The Flood/Post-Flood Boundary Is in the Late Cenozoic with Little Post-Flood Catastrophism*, 2014; michael.oards. net/PostFloodBoundary.htm.
- Oard, M.J., Relating the Lava Creek ash to the post-Flood boundary, J. Creation 28(1):104–113, 2014.
- Geisler, J.H., Colbert, M.W., and Carew, J.L., A new fossil species supports an early origin for toothed whale echolocation, *Nature* 508: 383–386, 2014.
- 21. Geisler et al., ref. 20, p. 383.
- Wang, M., Zheng, X., O'Connor, J.K., Lloyd, G.T., Wang, X., Wang, Y., Zhang, X., and Zhou, Z., The oldest record of ornithuromorpha from the early Cretaceous of China, *Nature Communications* 6:6987, 2015; doi:10.1038/ ncomms7987.
- Brussatte, S.L., Niedźwiedski, G., and Butler, R.J., Footprints pull origin and diversification of dinosaur stem lineage deep into Early Triassic, Proceedings of the Royal Society B 278: 1107–1113, 2011.
- Andres, B., Clark, J., and Xu, X., The earliest peterodactyloid and the origin of the group, *Current Biology* 24:1011–1016, 2014.
- 25. Rosen, M., Oldest flying reptile, *Science News* **185**(11):5, 2014.
- Mertens, K.N., Takano, Y., Head, M.J., and Matsuoka, K., Living fossils in the Indo-Pacific warm pool: a refuge for thermophilic dinoflagellates during glaciations, *Geology* 42(6): 531–534, 2014.
- Gordon, D., Northern-hemisphere fossil discovered living in New Zealand, niwa.co.nz/ news/northern-hemisphere-fossil-discoveredliving-in-new-zealand, 29 May 2014.

CREATION.com 5