

## *Review of*

Stephen William Hurrell

# **Dinosaurs and the Expanding Earth – Solving the Mystery of the Dinosaurs’ Gigantic Size**

by GIANCARLO SCALERA

Have you seen the huge dinosaurs footprint in Colorado? Or in Australia? Have you looked critically at a dinosaur skeleton in a Paleontology Museum (If you visit the Cappellini Museum in Bologna)? The size, posture and estimated weight of these giants are impressive and the problem of the mechanical deambulation of such large bodies has been posed many times. In particular, Carnosauria (bipedal infraorder) and Sauropoda (quadrupedal infraorder) have corporal weights in some cases exceeding 5.0 and 10.0 ton respectively. Finally, the arboricol-like arms of the biped Tyrosauridae (7.5 ton) lead people to believe that somewhat paradoxical and unknown physical properties have characterized the ‘lost world’ of Mesozoic. It is then legitimate to search for possible clues of a lesser gravity force in the geologic past.

Stephen Hurrell’s book ‘Dinosaurs and the Expanding Earth – Solving the Mystery of the Dinosaurs’ Gigantic Size’ offers a discussion of this problem, proposing an increasing gravity throughout geologic time. The book is not completely focused on the gravity problem and tackles several other topics of the expanding Earth idea. The first two chapters are about the bio-mechanical aspect of the problem and an engineering discussion about the effect of changing scale concludes that the bones of the larger dinosaurs were too weak to sustain the animals weight. The applied gravity force overcomes the maximum allowed by the strength of the bones. Fractures should appear, but evidence found by palaeontologists favours quick walking – and sometimes running – heavy animals. The succession of fossils supports a progressively diminishing size of fauna from Jurassic to the Recent. The cause can be the changing local gravity of our planet and an account of different causes of this process is provided. The next five chapters concern ‘Drifting continents’, ‘The expanding Earth’, ‘Meteorites and Ice Ages’, ‘The Solar System’ and ‘The ancient Earth’. The reader will find a review of many of the main arguments which constitute the background evidence in favour of Earth expansion, but also some additional original proof. An example of these new arguments – that merit assessment and specific research by field specialists – is the climatologic thesis: if the Earth were smaller the width of the circulation cells from equator to poles would be shorter and a shorter distance should correspond to a lesser variation in temperatures of the climatic bands.

The book is written in a plain straightforward style and its target is a wide public not interested in specialist treatises. Its clear and lively descriptions lead the reader straight to the core of the arguments. The book has been improved in a succession of new editions and I have found the most recent one, in the form of an e-book, more mature and typographically more pared down to essentials: many redundant figures of the old hard-bound edition (2001) have been eliminated and the pages are put together better.

I think the book should adopt a publisher for diffusion in the normal book-shops circuit, to enhance its widescale diffusion of the expanding Earth framework, to the general public and scientists alike. Indeed, many of topics of Hurrell's topics could well be the topics of joint scientific collaboration between engineers and paleontologists.

*REFERENCES*

HURRELL, S.W. (2004): *Dinosaurs and the Expanding Earth – Solving the Mystery of the Dinosaurs' Gigantic Size* (One-off Publishing, Great Britain), pp. 116.