

and the discovery of *Seismosaurus hallorum* can't have helped. **Seismosaurus: The Earth Shaker** (5) is a first-person, first-hand account of how *Seismosaurus* was discovered in New Mexico in 1979, was excavated, came to be perceived as a new species, was investigated, was named and died. It appears to be the longest dinosaur yet known (46 ± 6 m) and possibly the largest land animal ever to have lived (up to 100 tonnes). This is an exciting story of real hands-on palaeontology with its thrills and headaches, its principles and practices, and its need for ad hoc, on-the-spot solutions. The book also looks at sauropods in general, and especially at *Seismosaurus*'s sister dinosaurs, *Supersaurus*, *Ultrasaurus*, *Brachiosaurus*, *Diplodocus*, etc. An unusual book, perfectly done and with remarkable photographs.

Now to the more advanced material. **Dinosaur Systematics** (6) contains 19 of 28 papers presented at a conference on that topic at the Tyrrell Museum of Palaeontology, Drumheller, Alberta. This was dinosaur experts talking to each other – on clades and grades in dinosaur systematics, on shape analysis in the study of dinosaur morphology, on species determination in sauropods, on variation in theropods, on teeth and taxonomy in ankylosaurs, and on much more besides. Though clearly a book for dinosaur professionals, some of it, as with most such books, can be understood by others if they are interested and persevere enough. One of the interesting facts to emerge is that 265 genera of dinosaur had been recognized by 1987, 40% of which had been described since 1969 – a numerical indication of the recent upsurge in interest (Book (7) below updates this to 285 genera by 1990.)

One of the editors of (6) is one of the authors of (2). One of the editors of **Dinosaur Eggs and Babies** (7) was one of the authors of (4) and was covered in (3), and another of the editors of (7) was an editor of (6). Yes, it's a small world indeed; and here are its inhabitants again, talking among themselves, although in this case far more can be understood by non-professionals. The book is again a collection of papers, not only on eggs and babies but also on nests, a topic mysteriously missing from the title; and the articles vary from the general (e.g. 'Dinosaur nesting patterns') to the specific (e.g. 'Eggs and nests from the Cretaceous of Mongolia'). This is a fascinating

Fig. 2. A *Dryosaurus* nesting site being raided by consorial mesosuchian crocodiles. From (7).



volume for non-specialists precisely because so much of its contents is accessible, although even to summarize so much material would be impossible here. For those armchair dinosaur students who feel that one of the disadvantages of the recent upsurge in interest in dinosaurs is that there is now an impossible amount to buy and read, perhaps there is hope here: why not limit interest largely to the embryo and young dinosaur? But hurry. The fact that *Dinosaur Eggs and Babies* has 372 pages suggests that even this limited aspect of dinosaur studies could soon get out of hand.

Among the public at least, dinosaurs are often seen these days in the context of their extinction – a consequence of the obsession with the supposed K/T asteroid. But dinosaurs also lived – and originated, in the Triassic–Jurassic. **In the Shadow of the Dinosaurs** (8) is about those times but, as the title suggests, not about the origin of dinosaurs but about the small vertebrates that lived in the shadow of their origin and radiation, the study of which may be able to tell us much about the evolution of modern terrestrial ecosystems. This book – again, mainly for professionals – thus looks at the taxonomy and phylogeny of the principal vertebrate groups (amphibians, lepidosaurs, crocodylomorphs and mammals), the most significant early Mesozoic tetrapod assemblages worldwide and how faunal turnover at the time in question is measured. It represents the first attempt to collate information on the small vertebrates during a period in which there was a major mass-extinction event (end-Triassic), or possibly two.

Stephen Hurrell's **Dinosaurs and the Expanding Earth** (9) is something completely different. Hurrell's thesis – yes, this is an original work rather than a re-presentation of existing knowledge – is that large dinosaurs were forced to give way to smaller mammals because the Earth's gravity has increased, making the life of large creatures untenable. Fair enough; but, surprisingly, he then links that to the expanding Earth hypothesis – surprising, because if the Earth has expanded, gravity at the planet's surface will have *decreased*, unless some other phenomenon has more than compensated for it. Hurrell's compensation mechanism is that the Earth is continuously increasing in mass. Some might regard Hurrell as a crank, but he's much more intelligent than that, and his thesis is well presented. On the other hand, it's probably fair to say that his work has not been peer-reviewed, in which case he will find that he has few serious readers, who are (usually rightly) suspicious of publication outside the well-known circle of academic publishers. Some of Hurrell's ideas appear strange, but much stranger things have appeared in mainstream scientific publications.

Finally, we come to Janice VanCleave's **Dinosaurs for Every Kid** (10), which sounds like one of those books ever so slightly disparaged above. Not so. The remarkable Ms VanCleave, probably little known in Britain, is a former science teacher in the USA who now tours schools, museums and science fairs to demonstrate scientific matters to children (mainly). She has already written 14 books on different branches of science. Following a similar pattern, in this one she describes, and discusses the background to and results of, a series of simple experi-